The Relationship of child maltreatment potential and mothers’ satisfaction with their neglected children

Kelsey M. Bradshaw

University of Nevada, Las Vegas
THE RELATIONSHIP OF CHILD MALTREATMENT POTENTIAL
AND MOTHERS’ SATISFACTION WITH
THEIR NEGLECTED CHILDREN

by

Kelsey Michael Bradshaw

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Bradley Donohue, Committee Chair
Daniel Allen, Committee Member
Murry Millar, Committee Member
Chad Cross, Graduate Faculty Representative

Ronald Smith, Ph. D., Vice President for Research and Graduate Studies and Dean of the Graduate College

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ABSTRACT

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by

Kelsey M. Bradshaw

Dr. Bradley Donohue, Examination Committee Chair
Professor of Psychology
University of Nevada Las Vegas

Parental satisfaction refers to the extent to which parents are satisfied with their children in relation to parent-child interactions and child behavior. The relationship between parental satisfaction and child behavior problems has been demonstrated extensively in the literature. Children who exhibit increased behavior problems appear to be at increased risk of parental aggression. Maltreating parents evidence greater levels of parental dissatisfaction as compared to caregivers of children who are not maltreated. Thus, low parental satisfaction is a suspected risk-factor for child maltreatment. Previous studies have shown that parental substance abuse is also strongly related to occurrence of child maltreatment. This study was designed to determine if various aspects of parental satisfaction can predict child maltreatment potential in mothers referred for treatment of child neglect and drug abuse and determine if parental satisfaction items are more sensitive to detecting risk of child maltreatment potential than measures of child behavior problems. Results found that parental satisfaction had limited utility in predicting child maltreatment potential due to issues of socially desirable responding, as indicated by CAPI Lie scores. Satisfaction with the parent-child relationship appeared to be a protective factor; increased satisfaction was related to decreased child maltreatment.
potential. Further, after removing participants high in socially desirable responding, decreased overall happiness with children was associated with increased child maltreatment potential. No relationship was found between behavior problems and child maltreatment potential. Study outcomes indicate the importance of including validity measures when assessing parental satisfaction and child maltreatment risk.
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DEDICATION

To my lovely wife, Jenna Bradshaw; my love, my support, and my life.
CHAPTER 1
INTRODUCTION

The extent to which parents are content with their children has been extensively studied in various contexts, particularly within the parent-child relationship and participation of children in activities (e.g., school, peer relationships; Carpenter & Donohue, 2006). Most measures of parental satisfaction have great relevance to treatment providers (DeCato, Donohue, Azrin, Teichner & Crum, 2002). For instance, parental satisfaction measures can be used to identify areas that are disconcerting to parents, and thereby be utilized to develop consumer-driven treatment goals (i.e., areas of greatest dissatisfaction may be emphasized in treatment). However, we know very little about the relationship of parental dissatisfaction in clinical populations, such as child maltreatment (Carpenter & Donohue, 2006) and substance abuse (Donohue, DeCato, Azrin, & Teichner, 2001; Moore & Finkelstein, 2001). Indeed, an important contribution to the scientific literature would, therefore, be to better understand relationships between specific areas of parental satisfaction and child maltreatment potential. It would be expected that parental satisfaction would increase the likelihood of child maltreatment potential because parental satisfaction is often associated with irritability and aversive interactions between parents and their children. For similar reasons, it might be expected that child behavior problems would be positively correlated with child maltreatment potential. Another important contribution to the literature would be to determine if parental satisfaction measures are a relatively more useful in predicting child maltreatment potential as compared with measures of child behavior problems.
CHAPTER 2

LITERATURE REVIEW

When examining parental satisfaction it is important to consider how parents perceive both interactions with their children, as well as their perceptions of behaviors exhibited by their children. For instance, the extent to which children react to attention, praise, rewards, redirection, and punishment appears to influence satisfaction of parents with their children, and the strength in the parent-child relationship has been found to contribute to parent satisfaction in mothers (see Mouton & Tuma, 1988). Parent-child relationship factors often include youths’ responsiveness to the directives of their parents, quality of communication, reaction to praise or punishment, and involvement in the family (Donohue et al., 2001). If children behave the way their parents expect and desire, these parents are likely to be more satisfied with them, and thus more likely to praise the behaviors of their children. Parental praise in turn may lead to improved behavior for these children, thus perpetuating a positive cycle of interaction. Alternatively, parents are likely to be dissatisfied with their children when their behaviors (e.g. sarcasm, rude behavior, non-compliance) are negatively perceived, which in turn may result in their failure to provide future positive reinforcement.

When children respond positively to praise, such as replying, “You’re welcome,” and continue to engage in desired behaviors, parents are more likely to feel appreciated and consequently reinforce their children (Azrin, Naster, & Jones, 1973). Conversely if children respond negatively to praise or fail to respond to praise, parents may feel unappreciated and consequently discontinue reinforcement; even when children engage in positive behaviors. Thus, parental dissatisfaction is probably inversely influenced by
perceived problems in the behavior of their children, including those behaviors involved in the interactions between parents and their children.

Exemplifying the unequivocal relationship between parent-child interaction and parental satisfaction, Cantor and Gelfand (1977) conducted an experiment involving confederate children who were trained to be either responsive and pleasant or non-responsive and avoidant with adults. In a responsive condition, children initiated conversation, asked for evaluations of their performance on art tasks, and smiled when praised. Children in an unresponsive condition were trained to avoid eye contact and conversation with the adult participants, even when praised. Results indicated that adults rated children as more attractive, likable, and competent when children behaved in a responsive manner than when they were unresponsive. Of course, these findings suggest adults are probably more satisfied with children who react positively to praise and are responsive in their interactions, and may, in fact, be disappointed when children do not react positively to their praise. Further, it would be expected that parents would be more sensitive to child non-responsiveness than strangers.

Another influential factor in the parent-child relationship is communication. Sillars, Koerner, and Fitzpatrick (2005) showed openness of communication demonstrated a positive relationship with parental understanding, while use of parental power to suppress and censor the communication of children evidenced a negative relationship. Parental understanding was positively related to parent-child relationship satisfaction. Parents who communicated with their children demonstrated a much better relationship than parents who exercised control over the communication with their children. In fact, parents who perceived they had good communication with their children
were more likely to rate higher in satisfaction, as compared to parents who perceived poor communication with their children. Indeed, poor communication between parents and children will likely increase parental dissatisfaction and place the children at risk for child maltreatment.

How Do the Behaviors of Children Influence Parental Satisfaction?

Compliance with rules and responsibilities (e.g., chores, completing homework, and conduct in the home) in children appear to influence parental satisfaction. Allison and Schultz (2004) showed that early adolescence is a period of frequent parent-child conflict, and that the majority of the conflicts are over issues such as household chores, taking care of one’s room, and homework. In general, non-compliance with parental rules tends to cause parent-child conflicts, while parents’ perception of their children’s behavior influences the degree of conflict (Smetana, 1989). To assist in understanding how conflicts within parent-child relationships relate to parental satisfaction, Schoenleber (1988) queried parents to report the number of conflicts with their children, as well as their current level of parental satisfaction. She found that parents who reported a high level of parent-child conflict also reported lower levels of parental satisfaction. It would be expected that mothers experiencing a high level of conflict with their children would rate lower in satisfaction with regard to their children following household rules. A lower level of satisfaction might then put the child at increased risk for child maltreatment.

Responsibilities aren't always stated as set rules, but may be expectations parents have for their children. Responsibilities include parents’ views about friends, activities, or school performance of their children. How children decide to behave in accordance with their responsibilities influences parental satisfaction. In a study of seventh-graders and
their parents, Hill & Holmbeck (1987) found issues of responsibility (i.e. disagreements about contact with peers, personal habits, and family obligations) were negatively associated with parental satisfaction. Parents who view their children as less responsible are more likely to be dissatisfied with them.

Academic failure, lack of commitment to school, and truancy are other factors that may decrease parental satisfaction (Downing-Matibag, 2009). According to Smetana (1989) conflict over homework and academic achievement occur at a high rate during early adolescence. Poor academic achievement contributes to lower parental satisfaction. Along these lines, a positive relationship between parental satisfaction and school performance was evidenced in a study of gifted junior high school students and their parents (Strom, Strom, Strom, & Collingsworth, 1994). Similarly, among a variety of various domains relevant to the parent-child relationship (i.e. communication, friends, curfew, household rules, schoolwork, response to discipline, drug use, and illegal behavior), schoolwork exhibited one of the strongest negative relationships to parental satisfaction in conduct disordered and substance abusing youth (Donohue et.al, 2001). The current study examines the assumption that conflict related to school work and educational activities will be associated with parental dissatisfaction, which may influence child maltreatment potential.

As the previous review indicates, the relationship between parental satisfaction and child behavior problems has been demonstrated extensively in the literature. Researchers examining this relationship consistently indicate that lower levels of satisfaction are associated with behavioral problems and perceived severity of behavior problems (Ammerman, Loeber, Kolko, & Blackson, 1994; Bradford, Vaughn, & Barber,
Mouton and Tuma (1988) found that mothers of children with behavioral problems exhibited less satisfaction in their parenting role, as compared to matched control mothers. Ammerman and colleagues (1994) found a positive relationship between the level of the child behavior problems and parental dissatisfaction in a sample of 10 to 12 year-old boys and their parents. More recently, Nalavany, Glidden, and Ryan (2009) found that behavior problems in adopted children were a significant predictor of parental dissatisfaction in foster parents. The behavior problem/parental satisfaction relationship could be due to parents being less satisfied with their children, which may result in the children acting out behaviorally due to a lack of parental warmth or interaction. It is also possible that children could exhibit behavior problems due to other circumstances before there is a change in parental satisfaction. In the latter case, parents may have higher satisfaction initially but then decrease in satisfaction once children begin to exhibit behavior problems. Currently, there does not appear to be widespread agreement regarding the direction of this relationship (see Donohue et.al, 2001). However, when foster children with behavior problems are adopted into a new family, their behavior problems decrease parental satisfaction (Groothues, Beckett, & O'Connor, 2001; Nalavany, Glidden, & Ryan, 2009). Although it may be assumed that these children developed behavior problems due to difficulties with their family of origin or previous foster placement, it would appear that their antecedent behavior problems decrease parental satisfaction.

Children who exhibit higher levels of behavior problems are more likely to engage in behaviors that result in disciplinary encounters (Reid, 1986). Parents who
discipline their children more often may rely on physical types of discipline (i.e. spanking or hitting), which may increase in severity over time. Children who exhibit significantly more behavior problems appear to be at increased risk of parental aggression (McElroy & Rodriguez, 2008). Indeed, Mammen, Kolko, and Pilkonis (2003) demonstrated significant positive correlations between externalizing child behavior and aggressive parental behavior using path analysis. Parents who demonstrated low satisfaction with their children were predisposed to respond to the children with more negative emotion, and to exhibit more negative behaviors toward the children. When parents and children use coercive behaviors to gain control over the other this appears to influence an escalating coercive cycle, which may lead to child maltreatment. Simons, Beaman, Conger, and Chao (1993) found that harsh discipline (i.e., observational and child self-reports of the frequency with which the parent “yells, spanks, slaps, or hits with an object”) was inversely related to parental satisfaction. Along these lines, parental dissatisfaction may be an indicator of child maltreatment potential.

How Does Parental Dissatisfaction Appear to Relate to Child Maltreatment?

Although a full delineation of child maltreatment is beyond the scope of this paper, this term generally includes child neglect, child physical abuse, child sexual abuse and emotional neglect. It is often referred to as any recent act, or failure to act, on the part of a parent or caretaker, which results in death, serious physical injury, emotional harm in children, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm (Child Maltreatment, 2007). Injuries can include, kicking, shaking, biting, hitting, and choking, and range in severity from minor bruising to death. Neglect generally entails failure of the guardian to meet the physical (e.g., food, shelter,
supervision), medical (i.e., necessary medical or mental health treatment), emotional (e.g., continuous yelling, belittling, critical remarks to children, severe lack of attention), or educational (e.g., denying education, failing to assist in schoolwork) needs of children (National Clearinghouse on Child Abuse and Neglect Information, 2004). In 2007 an estimated 794,000 children were victims of abuse or neglect (Child Maltreatment, 2007). This number represents the number of cases that were substantiated out of a total of 3.2 million Child Protective Service (CPS) referrals brought to the attention of CPS.

In a sample of physically abusive, neglectful, and matched control mothers, Azar and colleagues (1984) found that maltreating groups were found to have more unrealistic expectations than the control group. Parental satisfaction has been found to be a better predictor of harsh discipline as measured by observation and child report, compared to parental education, extent of depression, beliefs about discipline, and parents being subject to harsh discipline in their own childhood (Simons et al., 1993). Similarly, Brown, Cohen, Johnson, and Salzinger (1998) found that maternal dissatisfaction with children was a significant risk factor for child maltreatment after controlling for risk factors in multiple domains. In a sample of Hispanic and Caucasian parents low parental satisfaction was significantly correlated with high Abuse Scale scores on the Child Abuse Potential Inventory (CAPI; Rodriguez, 2008). A potential limitation of the aforementioned study was that the Parent Satisfaction Scale (PSS) examines satisfaction with the role of being a parent and not satisfaction with their children. Thus, previous research supports parental satisfaction as a predictor of negative interactional style with children, and may be a risk factor for child maltreatment.
Substantiated cases of abuse and neglect appear to evidence greater levels of parental dissatisfaction as compared to caregivers of children who are not abused and neglected. For example, Trickett and Susman (1988) found that parents of physically abused children reported significantly less satisfaction with them compared to controls matched on demographics. One limitation of the aforementioned study was the measure of parental satisfaction. Trickett and Susman used a list of 17 characteristics describing children. Parents were asked to pick the three most important characteristics and then rate their satisfaction with these characteristics. The satisfaction ratings were averaged to obtain an index of parental satisfaction. Mammen and colleagues (2003) examined parental satisfaction with an identified child in a sample of clinically referred, physically abusive caregivers. Results showed parental satisfaction as measured by the Child Rearing Inventory (i.e., measured during the year previous to the study and at a 12 week follow-up after the study), was significantly correlated with aggressive parental behaviors. Moreover, "previous year parental satisfaction" was significantly correlated with parent reports of aggressive parental behavior measured at the 12 week follow-up. Although there is a dearth of research examining the specific relationship between child maltreatment and parental satisfaction, it appears that parents classified as physically abusive (i.e., parents with substantiated reports of abuse) evidence relatively low scores on parental satisfaction.

Investigations of parents classified as perpetrators of child maltreatment can help to establish concurrent validity of parental satisfaction measures, as it allows researchers to examine levels of satisfaction in parents with substantiated cases of child maltreatment. In a study involving non-abusive parents, Kolko, Kazdin, Thomas, and
Day (1993) found that parents with high scores on a measure of child abuse potential reported lower satisfaction with their children compared to parents with low scores on this measure. Therefore, identified perpetrators of child maltreatment, and those parents who have not been found to maltreat their children, may be at-risk to engage in future episodes of child maltreatment when they are dissatisfied with their children. Certainly, low levels of parental satisfaction may be an indicator of child maltreatment potential. The current study contributes to a scarce literature on parental satisfactions influence of child maltreatment by examining cases of child neglect.

How Does Parental Substance Abuse Appear to Relate to Child Maltreatment?

Another influential factor in the relationship between child maltreatment and parental satisfaction is parental substance abuse. Previous studies have shown that parental substance abuse is strongly related to occurrence of child maltreatment, and is a growing problem among Child Protective Services (CPS) cases (Magura & Landet, 1996). In a sample of maltreated children that had initially received in-home services, Jones (2005) found that 68% of children had mothers who abused alcohol or drugs and 37% of children had mothers who abused both. For more than a decade, studies have suggested that a sizable majority of the families involved in Child Welfare Services (CWS) are affected by parental substance use disorders. Along these lines, the Department of Health and Human Services in its report to Congress in 1999 stated that between one third and two thirds of children in CWS were affected by parental substance abuse (Young, Boles, & Otero, 2007). Indeed, drug and alcohol abuse is a primary factor that has been linked to the risk of intentional child maltreatment (Donohue, Romero, & Hill, 2006; Dunn, Tarter, Mezzich, Vanyukov, Kirisci, & Kirillova, 2002; Hamilton, &
oftentimes, parents who abuse drugs will spend much of their time engaging in behavior associated with using drugs or being under the influence, rather than caring for their children. These behaviors are more likely to result in child neglect since the parent is not supervising their children and/or failing to provide basic necessities or attention to their children (Corcoran, 2000). Unborn children are also at-risk of being neglected due to their mother’s substance use. For instance, prenatally exposed children are at greater risk of entering CWS through neglect or abuse related to ongoing parental substance abuse (Young et.al, 2007). Furthermore, some states consider prenatal substance exposure detected at birth to be evidence of child abuse or neglect (Department of Health and Human Services, 1992). Children of parents with substance abuse problems are at an increased risk of being a victim of child maltreatment, both intentionally and unintentionally.

Substance abuse has an adverse impact on family functioning (Bijur, Kurzon, & Overpeck, 1992; Davis, 1990), and it has been identified as a key predictor of re-reports and substantiation of child maltreatment (Wolock & Magura, 1996; Wolock, Sherman, Feldman, & Metzger, 2001). In a study by English, Marshall, and Orme (1999), likelihood of substantiating child maltreatment was determined by caregiver substance abuse. Principal risk factors associated with re-referral and recurrences include parents own experience of child abuse and neglect, history of domestic violence, caregiver impairments, and substance abuse. Using a sample of substance abusing parents, Fuller and Wells (2003) found 55% of cases had substance abuse as an identified safety factor, which increased the risk for short-term child maltreatment recurrence. Hamilton and Browne (1999) found similar results. Parental substance abuse may lead to some publicly
visible parental behavior that is viewed by community reporters as endangering the welfare of the child. It is also likely that the substance using parents may be under closer scrutiny once they are identified as users.

There is limited research examining the direct relationship between parental substance abuse and parental satisfaction (Tarter, Blackson, Martin, & Seilhamer, 1993). Libby and colleagues (2008) found that lifetime substance use disorder mediated the relationship between parents’ own experience of child maltreatment and parenting satisfaction in a sample of Native Americans. Ammerman and colleagues (1994) found support for a positive relationship between substance abuse and parental dissatisfaction, demonstrating high levels of parental dissatisfaction in families with substance abusing fathers compared to a control. However, their study is limited in that it focused on substance abuse within fathers of 10 to 12 year-old males. For instance, there are many children (12.2% of households; i.e. female householder, no husband present) who live in single mother homes (U.S. Census, 2000). Further, it is highly likely that parents who abuse substances will rate lower in parental satisfaction, regardless of the age of their children.

**Issues to Consider in Predicting Child Maltreatment Potential**

As described, parental reports of problematic child behavior and parental satisfaction are two self-report methods that have been used to examine child maltreatment potential. Although, behavioral problems have been shown to be an indicator of child maltreatment, it is unclear whether or not measuring behavioral problems is a more effective means of indicating child maltreatment than measuring parental satisfaction. Occurrence of behavior problems may not necessarily represent
parental concern of behaviors. Thus, higher frequencies of behavior problems might not indicate child maltreatment potential as research has also shown that parents tend to over-report behavior problems (Kolko & Kazdin, 1993). Parental satisfaction measures have the benefit of measuring both dissatisfaction with problematic child behaviors and other aspects of the parent-child relationship. Additionally, it is highly probable that parents will be more open to reporting honestly about their level of satisfaction in specific areas relevant to their children but may feel a stigma for reporting behavioral problems or reporting that a behavior is problematic for them. Finally, parental satisfaction measures can identify areas that are disconcerting to parents, and thereby may be utilized to develop consumer-driven treatment goals in areas other than just child behavior problems.

Purpose of Study

Based on previous research it is clear that many facets of child behavior and the parent-child relationship are related to parental satisfaction. Further, low parental satisfaction may be a risk-factor for child physical abuse and potentially neglect. Aside from parental dissatisfaction being a possible risk factor for child maltreatment, previous research indicates a strong relationship between parental substance use and child maltreatment. With the exception of Donohue and colleagues (2001), current research has not examined specific areas in which perpetrators of child maltreatment (especially those with a history of substance abuse) are most and least satisfied in relationships with their children. Moreover, little is known regarding how these factors may influence child maltreatment potential. There is also a dearth of information available regarding how knowledge of parental satisfaction may be utilized to guide treatment in families referred
for child maltreatment (see Donohue, Romero, & Hill, 2006). This has important implications for treatment, as maltreated children evidence greater behavioral problems than non-maltreated children, making it more difficult for perpetrators of child maltreatment to develop strong bonds with maltreated children (Litty, Kowalski, & Minor, 1996).

Most measures that purport to assess parental satisfaction evidence a lack of clinical utility, including exclusive evaluation of overall satisfaction and/or non-specified behaviors, and evaluation of satisfaction with the parents’ children rather than a specific target child (Donohue et.al, 2001). This study attempts to demonstrate the potential usefulness of a parental satisfaction measure designed to guide intervention planning and to measure treatment gains in a sample of substance using mothers referred for child neglect. The parental satisfaction measure was used to demonstrate the need to involve both the maltreating parent in treatment and the maltreated child. This study examines the extent of parental satisfaction in substance abusing mothers regarding their neglected children. Parental satisfaction was assessed in various domains of the parent-child relationship and child conduct, and the relationship of these domains with child maltreatment potential was examined. It is hoped this study will assist in determining which areas of dissatisfaction are most associated with child maltreatment potential in substance using mothers referred for child neglect.

Aim 1: To determine if various aspects of parental satisfaction can predict child maltreatment potential in mothers who are referred for treatment of child neglect and drug abuse. It was hypothesized that low parental satisfaction would predict child
maltreatment risk in a sample of mothers who are referred to treatment for child neglect and drug abuse.

Aim 2: To determine if parental satisfaction items are more sensitive to detecting risk of child maltreatment potential than measures of child behavior problems. It was hypothesized that at least some domains of parental satisfaction would be more predictive of child maltreatment potential than measures of child behavior problems.
CHAPTER 3  
METHODS  

Participants  

Retrospective data was gathered from adult female participants (N = 82) in a treatment outcome study funded by the National Institute of Drug Abuse (NIDA). To be eligible for participation in the study, individuals met the following criteria: (a) be a mother reported to the Department of Family Services (DFS) for child neglect within the previous four months, (b) be at least 13 years old, (c) used non-prescribed substances within the past 4 months and (d) evidenced illicit Substance Abuse or Dependence, (e) living with the child related to the referral or it was the intention of the Court to return the child home if safe to do so, (f) had at least one adult individual willing to participate in the participant’s treatment, and (g) not be referred primarily for sexual abuse or domestic violence.

The sample was predominantly Caucasian (45%) but included African Americans (26%), Asian Americans (3%), Hispanics (14%), and other ethnic backgrounds (13%). Age of participants varied within the range of 18 to 49 years old with a mean of 29 (SD = 7.86). Half of the participants endorsed a marital status of single (50%), while a third of the sample endorsed cohabiting (33.3%). Most females were unemployed (87.5%); with very few endorsing a full time job (7.5%). The mean educational grade level completed was 11th grade (SD = 1.96), and their mean total monthly income reported (i.e. work, government assistance/benefits, and family assistance) was $2334 (SD = $6820.69). Approximately 50% of the sample made less than $1000 per month. Of the identified children, there were slightly more females (55%) than males (45%). Children ranged in
age from less than one month old to fourteen years old with a mean age of 3 years and 2 months (SD = 46.39 months). At the time of the assessment approximately half of the children (54%) were living in the home.

**Measures**

**Eyberg Child Behavior Inventory**

The Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978) is a 36-item parent rating scale of externalizing behavior (i.e. “Delays in getting dressed,” “Refuses to do chores when asked,” “Argues with parents about rules,” etc.) in children between the ages of 2 and 16 years. The Intensity Scale measures the frequency of child behavior problems on a 7-point scale from (1) never to (7) always. The Problem Scale measures the degree to which each of the endorsed behaviors are problematic for the parent (1 = yes, 2 = no). The Intensity and Problem Scales of the ECBI yield internal consistency coefficients of .95 and .93; inter-rater reliability coefficients of .69 and .61; and test–retest reliability coefficients of .80 and .85 across 12 weeks and .75 and .75 across 10 months (Eyberg & Pincus, 1999). Across studies examining the psychometric properties and utility of the ECBI indicate good levels of reliability and validity (Funderburk, Eyberg, Rich, & Behar, 2003).

**Child Abuse Potential Inventory**

The Child Abuse Potential Inventory (CAPI; Milner, 1986) is a 160-item screening instrument designed to assess potential of parents to neglect and physically abuse their children. Participants respond to statements (e.g. “Children should never be bad.”, “I like most people.”, “I am often angry inside.” etc.) utilizing a scale of agreement (1 = agree, 2 = disagree). The CAPI consists of six content scales (i.e. rigidity in
parenting attitudes, distress, unhappiness, and problems with child, family, and others),
and three validity scales (i.e. lie, random, and inconsistency). The Abuse subscale
includes 77 items with a maximum score of 486; higher scores indicating a greater
likelihood of child maltreatment potential. Scores of 166 and 215 can also be used as
cutoffs to distinguish between participants at low vs. high risk for child maltreatment
potential. Scores of 215 are a more conservative approach and produce less false
positives. The Problems with Child subscale includes 6 items with a maximum score of
30, with higher scores indicating a higher incidence of problems with children. The Lie
subscale is one of three validity scales used to determine valid responding. The scale
ranges in value from 0 to 18 with higher scores indicating a high likelihood of
participants presenting themselves in a favorable manner. Lie scores also have cutoff
values of 7 or 8 that can be used to determine if individual CAPI subscale scores can be
interpreted, or if participants have invalidated their responses. Cut-off scores of 8 are
used when participants have a 12th grade education or less. The CAPI is widely used, and
its reliability and validity are well supported (see Crouch, Milner, & Thomsen, 2001).

Modified Parent Satisfaction with Youth Scale

The Parent Satisfaction with Youth Scale (PSYS; Donohue, DeCato, Azrin, &
Teichner, 2001) consists of 11 content items that assess parents’ degree of satisfaction
with their youth in 11 behavioral domains (communication, friends and activities, curfew,
household rules, school performance, rewards, discipline, chores, use of alcohol, use of
drugs, illegal behavior). An additional item assesses parents’ “Overall Happiness” with
the child. For each item, parents endorse their extent of satisfaction with their child using
a scale of 0% to 100% happiness. Although each item can be treated as a separate index
of parental satisfaction, scores on the 11 content items can be quickly averaged to produce a general index of parent satisfaction (DeCato et al., 2002). Ease of administration and short completion time, along with the familiarity and meaningfulness produced by the use of percentage ratings, are judged to be strengths (Carpenter & Donohue, 2006). DeCato et al. (2002) report this scale has good clinical utility, and it has demonstrated excellent reliability and validity in conduct disordered and drug-abusing adolescents.

The psychometric properties of the PSYS have yet to be psychometrically evaluated in caregivers of maltreated children, and some of the items on the PSYS (i.e., drug and alcohol use, illegal behaviors) are not applicable for young children. Indeed, there is a lack of parental satisfaction measures that have been designed for children of all ages, especially with regard to child maltreatment populations (Carpenter & Donohue, 2006). Therefore, the PSYS was modified to be appropriate for participants of children of all ages, including infants. For the purposes of this study four items of the PSYS were retained due to their applicability to children of all ages (i.e., communication, reaction to my rewards, other “fill in the blank”, and overall happiness with my child), one item was modified to be more specific to substance abusing mothers. “Reaction to my rewards” was changed to “Reaction to my attention, praise, and/or rewards” to reflect additional methods of reinforcement. One item applicable to all age groups was added to assess perceived quality in the relationship (i.e. “How my child interacts with me”). The preceding five items are relevant to all participants with children. Six items of the PSYS were deemed to be relevant only to parents of children older than 18 months (i.e., compliance, reaction to my discipline, following rules around the house, safety skills, the
way my child does household chores, my child’s schoolwork). Three of these items were modified to be more specific to the population being examined. “Reaction to my discipline” was changed to “Reaction to my redirection or punishment.” The discipline item was modified to reflect additional methods of discouraging child behavior. “My child’s schoolwork” was changed to “How my child participates in educational activities such as reading or school with me.” This item was modified in order to account for younger children who may not yet be in a formal school setting. “Following rules around the house” was changed to “How my child follows house rules.” This item was modified to account for following house rules, as well as how children behave when following rules. One item applicable to children 18 months and older was added to assess satisfaction in children’s involvement with family (i.e., “How my child participates in family activities”). Thus, the modified scale includes 12 items. Participants with children older than 18 months are administered the entire scale.

Procedure
Recruitment and Method of Data Collection

Upon being referred for treatment by the Department of Family Services (DFS), the participant was contacted by a research assistant for a phone pre-screen to preliminarily validate that the above criteria were met. Once participants were determined to have met preliminary criteria they were scheduled for a pre-treatment assessment. Eligible and consenting mothers participated in the pre-treatment assessment to gather information on substance use history, potential substance use diagnoses, demographics, HIV risk behavior, child maltreatment potential, child behaviors, home safety, family functioning, and satisfaction. The pre-treatment assessment lasted between 3 and 4.5
hours. Of a relatively large battery of tests and measures administered, only 3 were utilized in the study (see measures section below). All subjects included in this study consented to participate. This study is consistent with the ethical guidelines established by the American Psychological Association and was approved by the Institutional Review Board for the protection of human participants at the University of Nevada, Las Vegas.
CHAPTER 4

RESULTS

Statistical Plan and Approach

The variables of interest in this study consisted of the 12 parental satisfaction items (i.e., communication, relationship, child response to praise, child response to consequence, educational activities, following household rules, family involvement, safety skills, chores, compliance, overall happiness, and other “fill in the blank”), 2 ECBI subscales (i.e. Problems & Intensity), and 3 CAPI subscales (i.e. Abuse, Problems with Child, & Lie). The first set of analyses examined relationships between items of the modified PSYS with the CAPI subscales utilizing Spearman’s rho coefficients. It was expected that the PSYS items and the Abuse and Problems with Child subscales would exhibit negative linear relationships. That is, as parental satisfaction in a specified area (e.g. communication) decreases, child maltreatment potential and problems with children increase.

The second set of analyses examined linear relationships between ECBI subscales and CAPI subscales examining Spearman’s rho coefficients. It was expected that the ECBI subscales and the Abuse and Problems with Child subscales would exhibit positive linear relationships. That is, as behavior problem frequency and intensity increases, child maltreatment potential and problems with children increases. Although it was anticipated that parental satisfaction and child behavior problems would be associated with increased risk for child maltreatment potential, it was expected that parental satisfaction areas would exhibit more risk than behavior problem frequency or intensity. The preceding analyses assist in determining the extent to which the variables of interest are relevant to
child maltreatment potential. All relevant variables of interest were then entered into multiple regression analyses to determine their relative predictability in child maltreatment potential. The first multiple regression consisted of “all age” PSYS items with significant correlations to child maltreatment potential. The second multiple regression consisted of “18 month and older” PSYS items with significant correlations to child maltreatment potential, while overall happiness was used in a linear regression to determine if it could be used as an overall measure of parental satisfaction. Finally, a third multiple regression analysis consisted of ECBI subscales. It was expected that parental satisfaction would be a better predictor of child maltreatment potential than child behavior problems. Since CAPI Abuse scores can be dichotomized into high and low risk, logistic regression was performed to provide further evidence of parental satisfactions ability to predict child maltreatment, as this procedure permits one to predict the probability that a participant belongs to either low or high risk child maltreatment groups. Logistic regression via moderate and high CAPI Abuse scores was used to examine the relative levels of risk for each parental satisfaction item. The aforementioned analyses were expected to help determine to what extent parental satisfaction could be used to predict child maltreatment potential risk classification.

Additional exploratory analyses were utilized in retrospect to determine the validity of participant responses (Shaffer, Huston, & Egeland, 2008). Given that there is a high likelihood that participants may feel pressured to provide socially desirable responses, linear relationships between the CAPI Lie scale and the ECBI and CAPI subscale scores and items of the modified PSYS were examined. It was expected that the Lie subscale would not exhibit a significant linear relationship with PSYS items, or ECBI
subscale scores, thereby indicating these items/scales are not associated with social desirability. However, this was not the case, so analyses were reexamined utilizing Lie subscale scores as a covariate.

Is There a Relationship Between Parental Satisfaction and Child Abuse Potential?

All variables were tested for normality using the Shapiro-Wilk statistic, to determine the distribution of the data. All variables examined, with the exception of the CAPI Lie scale and ECBI Intensity scale were found to be non-normal (W’s = .57 to .94, \( p < .02 \); see Table 2); hence, Spearman’s rho was calculated to examine associations among these variables. The Lie scale and Intensity scale were normally distributed (W = .96, \( p = .09 \) & W = .96, \( p = .16 \); respectively). Spearman correlation coefficients were computed between satisfaction items and CAPI subscales (i.e. Abuse and Problems with Child) to determine the relationship between parental satisfaction and child maltreatment potential and the relationship between parental satisfaction and parental problems with children. It should be noted that for all analyses involving the modified PSYS measure, Item 4 (i.e. “Other”) was not included due to a low participant response rate and high variability in response specificity.

Results indicated that more than half of the satisfaction items exhibited a significant negative correlation with abuse potential (i.e. communication, relationship, reaction to praise, overall happiness, following house rules, and school and educational activities; see Table 3). Participants reporting lower satisfaction within the aforementioned areas were more likely to score higher on the CAPI Abuse subscale. With regard to problems with children, many of the satisfaction items (i.e. communication, relationship, overall happiness, reaction to punishment, completing house chores, and
school / educational activities) exhibited significant negative correlations. Thus, participants reporting lower satisfaction within the aforementioned areas were more likely to score higher on the CAPI Problems with Child subscale.

To determine if child behavior problems were also related to parental satisfaction, Spearman correlation coefficients were computed between the ECBI subscales (i.e. Problems & Intensity) and CAPI subscales. Although it was believed that higher problematic behavior would be associated with decreased parental satisfaction, there were no statistically significant associations between the ECBI subscales (Intensity $r_s = .16, p = .34$ & Problems $r_s = .21, p = .21$; see Table 4) and the CAPI Abuse subscale. However, there was a statistically significant positive association between the ECBI Intensity scale ($r_s = .48, p = .003$) and the CAPI Problems with Child subscale. Participants reporting a higher frequency of child behavior problems on the ECBI scored higher on the CAPI Problems with Child subscale, compared to participants reporting a lower frequency of behavior problems. Additionally, there was a statistically significant positive association between the ECBI Problems subscale ($r_s = .46, p = .003$) and the CAPI Problems with Child subscale. Participants reporting that specified behaviors were problematic for them on the ECBI scored higher on the CAPI Problems with Child subscale.

**Does Parental Satisfaction Predict Child Maltreatment Potential?**

To evaluate how well parental satisfaction items predicted child maltreatment potential a multiple regression was conducted using items that exhibited a significant negative linear relationship to CAPI Abuse scores. Satisfaction with communication, relationship, and reaction to praise were entered into the first multiple regression. These
items were chosen based on their correlational relationship with abuse scores and because they were administered to all participants regardless of child age. The model was statistically significant, $F(3,75) = 3.98, p = .01, R^2 = .14$. However, the regression coefficients relating the satisfaction items to child maltreatment potential were not statistically significant, $p > .05$ (see Table 5), indicating that none of the individual items were capable of predicting child maltreatment potential alone and suggesting that the items may be highly collinear.

A second multiple regression was conducted using items specific to children older than 18 months that exhibited a significant correlation with abuse scores (i.e. following household rules & school/educational activities). This analysis was conducted to assist in determining if items specific to older children could be used to predict child maltreatment potential. The model was not statistically significant, $F(2,40) = 1.97, p = .15, R^2 = .09$, indicating that parental satisfaction items specific to children older than 18 months were unable to predict child maltreatment potential. It should be noted that based on the content of specified items, the number of participants included in the analysis was restricted due to the age of the identified children used in the sample.

Next, a linear regression analysis was conducted to evaluate how well “Overall Happiness with Children” predicted child maltreatment potential. Overall happiness was hypothesized to be an overall rating of parental satisfaction and was thus examined individually. The model was statistically significant, $F(1,78) = 8.62, p = .004, R^2 = .10$. The regression coefficient relating overall happiness ratings to maltreatment potential was moderate and statistically significant, $\beta = -.32, p = .004$. Thus, participants with lower overall happiness ratings had higher scores on the CAPI Abuse subscale;
participants who had higher overall happiness ratings had lower scores on the CAPI Abuse subscale.

To determine which parental satisfaction items were best suited to predict child maltreatment potential a step-wise multiple regression was conducted using satisfaction items that had been administered to all identified children (i.e. communication, relationship, reaction to praise, & overall happiness). The first model was statistically significant, $F(1,78) = 4.572, p = .036$, $R^2 = .06$, and the partial regression coefficient relating satisfaction with communication ratings to maltreatment potential was moderate and statistically significant, $\beta = -.24, p = .036$ (see Table 6). The second model was also statistically significant, $F(2,78) = 5.634, p = .005$, $R^2 = .06$. Satisfaction with relationship accounted for a significant increase in explained variance, $F(1,76) = 6.377, p = .014$, $\Delta R^2 = .07$, and was significantly associated with maltreatment potential, $\beta = .38, p = .014$. The third model was also statistically significant, $F(3,78) = 3.975, p = .011$, $R^2 = .14$, but did not account for a significant increase in explained variance, $F(1,75) = .70, p = .41$, $\Delta R^2 = .008$. The regression coefficient relating reaction to praise and rewards to maltreatment potential was not significant, $\beta = -.16, p = .41$. Finally, the fourth model was statistically significant, $F(4,78) = 3.024, p = .023$, $R^2 = .14$, but did not account for a significant increase in explained variance, $F(1,74) = .29, p = .60$, $\Delta R^2 = .003$. The regression coefficient relating overall happiness to child maltreatment potential was not significant, $\beta = -.11, p = .60$. It should be noted that variance inflation factors were greater than two in models 2, 3, and 4, indicating a high likelihood for multicollinearity among independent variables. Based on the aforementioned analysis, satisfaction with communication and the parent-child relationship were the most significant predictors of
CAPI Abuse scores. Thus, low levels of satisfaction in the parent-child relationship and with communication were associated with high CAPI Abuse scores.

A final multiple regression was conducted to determine if ECBI subscales were useful in predicting child maltreatment potential. However, intensity of problem behavior and number of behavior problems did not support a significant model, \( F(2,33) = .60, p = .55, R^2 = .04 \) (see Table 7). Thus, ECBI subscales were not able to predict CAPI Abuse scores. It should be noted that based on the age range and utility of the ECBI, the number of participants included in the analysis was restricted due to the age of the identified children in the sample.

**Can Parental Satisfaction Scores Accurately Classify Children as Being At-Risk for Child Maltreatment or Not?**

Logistic regression was conducted to determine if satisfaction items could predict whether participants would be classified as being significantly at-risk for child maltreatment potential according to the CAPI Abuse score cutoff (i.e. 166; Milner, 1986). Satisfaction items that demonstrated a significant linear relationship with CAPI Abuse scores were entered into the equation (i.e. communication, relationship, reaction to praise, overall happiness, following house rules, and school/educational activities). A new categorical variable (CAPI Abuse Cutoff) was computed using CAPI Abuse scores of 166 and higher (i.e. 0 = low risk, 1 = high risk). The regression equation fit significantly better than the null model, \( \chi^2 (df = 6) = 14.10, p = .029, \) Nagelkerke \( R^2 = .373 \).

Satisfaction with relationship was significantly associated with child maltreatment risk, \( \beta = -.104, \) Wald = 4.62, \( p = .032, OR = .901 \) C.I. = [.819 - .991]. A 1-unit increase in participants’ satisfaction with their parent-child relationship was associated with a .901
decrease in the likelihood of child maltreatment. All other satisfaction items were not significantly associated with child maltreatment risk classification. The regression equation accurately classified 77% of the participants. More specifically, 71% of participants who evidenced elevations on the CAPI Abuse subscale were accurately classified as at-risk for child maltreatment and 82% of those who did not evidence elevations on the CAPI Abuse subscale were accurately classified as not at-risk. These results suggest parental satisfaction in the parent-child relationship may be a protective factor in preventing child maltreatment, as increased satisfaction appeared to lower the likelihood of child maltreatment potential.

**Does Social Desirability Influence Parental Satisfaction, Child Behavior Problems, and Child Maltreatment Potential?**

Many of the participants in this study were cognizant that they were referred for assessment for illegal behavior, thus they may have perceived pressure to respond in a socially desirable manner when completing the study measures. Therefore, linear relationships between the CAPI Lie subscale and the ECBI and CAPI subscale scores and items of the modified PSYS were examined. Spearman correlation coefficients were calculated between the CAPI Lie subscale and items of the modified PSYS. As can be seen in Table 8, there was a statistically significant positive association between satisfaction items ($r_s = .26$ to $.49, p < .01$) and the CAPI Lie subscale. Thus, as parental satisfaction scores increased in specified areas so did CAPI Lie scores. There was not a statistically significant association between the ECBI subscale scores and CAPI Lie scores (Problems $r_s = -.19, p = .27$ & Intensity $r_s = -.25, p = .13$), indicating that high
scores on the CAPI Lie subscale were not related to how participants responded to measures of child behavior problems.

The aforementioned results suggest CAPI Lie scores may influence the relationship between satisfaction items and CAPI Abuse scores due to shared variance. Therefore, partial correlations were conducted to examine the relationship between satisfaction item scores and CAPI subscale scores while removing their shared variance with social desirability (i.e. CAPI Lie scores). Upon removal of the variance between social desirability and satisfaction, no significant correlations were observed between parental satisfaction items and child maltreatment potential (all $p > .05$). There was a negative correlation between parental satisfaction in following household rules and CAPI Problems with Child subscale scores ($r = -.43, p = .004$). Further, there was also a negative correlation between parental satisfaction in children’s school/educational activities and CAPI Problems with Child subscale scores ($r = -.41, p = .007$).

The Effect of Socially Desirable Responding on CPS Disposition

Since social desirability appeared to affect the relationship between parental satisfaction and child maltreatment, a retrospective exploratory analysis was conducted to examine the extent to which social desirability occurred between participants who were currently being investigated for child neglect (under investigation) by Child Protective Services (CPS) and those participants who had already been identified to neglect their children (open) by CPS. It was hypothesized that participants who were being investigated for neglect would be more likely to present themselves in a socially desirable manner than participants who were already identified to neglect their children. Hence, a between-subjects (i.e. open case vs. under investigation) multivariate analysis of variance
(MANOVA) was performed on the scores of parents overall happiness with their child and CAPI subscale scores. If cases that were currently being investigated had significantly higher CAPI Lie scores compared to open cases this would provide increased support for the assumption that social desirability influences the relationship between parental satisfaction and child maltreatment because it was hypothesized that persons who are being investigated would probably be under pressure to present themselves in a socially desirable manner.

To evaluate homogeneity assumptions, the Box’s M test of homogeneity of covariance was performed. The results of this test were not significant ($p > .05$). The Levene's homogeneity of variance test was also not statistically significant for any of the dependent variables ($ps > .05$). Using Wilk's criterion ($\Lambda$) as the omnibus test statistic, the combined dependent variables did not result in a significant main effect for CPS case disposition, $F(4, 67) = 1.457, p = .225$, partial $\eta^2 = .08$, indicating that with regard to parental overall happiness with children, lying, child maltreatment potential, and problems with children, there were no significant differences between participants who had open CPS dispositions and those under investigation.

As another check of the influence of social desirability on study measures, a between-subjects (i.e. Socially Desirable Responders according to elevated scores (>7) on the Lie Scale vs. Valid Responders) MANOVA was performed on parents overall happiness scores and the CAPI subscales. It was suspected that Socially Desirable Responders would endorse higher levels of overall happiness and rate lower in child maltreatment potential and problems with children than Valid Responders. Using Wilk's criterion ($\Lambda$) as the omnibus test statistic, the combined dependent variables resulted in a
significant main effect for social desirability, F(3, 76) = 7.83, p < .001, partial η² = .24, indicating that with regard to parental overall happiness with children, child maltreatment potential, and problems with children, there were significant differences between groups. There was a significant main effect for CAPI Abuse scores, F(1, 78) = 21.49, p < .001, partial η² = .22. Child maltreatment potential was significantly higher for Valid Responders (M = 204, SD = 13.8) relative to Socially Desirable Responders (M = 106, SD = 16.0). There was also a significant main effect for CAPI Problems with Children scores, F(1, 78) = 4.13, p = .045, partial η² = .05. Valid Responders endorsed having significantly more problems with children (M = 6, SD = 0.9) relative to Socially Desirable Responders (M = 3, SD = 1.1). Finally, there was a significant main effect for parental Overall Happiness ratings, F(1, 78) = 6.37, p = .014, partial η² = .08. Overall parental happiness with children was significantly higher for Socially Desirable Responders (M = 99, SD = 2.5) relative to Valid Responders (M = 91, SD = 2.2). Therefore, Socially Desirable Responders appear to bias their responses to be more favorable compared to Valid Responders.

Lastly, there was a negative relationship between Overall Happiness and CAPI Abuse scores when Socially Desirable Responders were removed from analysis (r = -.30). All other satisfaction items were not significantly associated with CAPI Abuse scores when Socially Desirable Responders were removed. For Valid Responders low overall happiness with children was associated with an increase in maltreatment potential.
CHAPTER 5
DISCUSSION

Upon initial examination the results of this study suggest that the modified PSYS may potentially be a useful tool when examining child maltreatment potential. Half of the satisfaction items (i.e. Communication, Relationship, Reaction to Attention, Praise/Rewards, Overall Happiness, Following Household Rules, and School/Educational Activities) were negatively related to CAPI Abuse scores. This would suggest that responses to these items are related to child maltreatment potential. Specifically, mothers responding with high satisfaction in the specified area would exhibit low child maltreatment potential scores, while mothers responding with low satisfaction in the specified area would exhibit increased child maltreatment potential scores. With regard to mother’s subjective experience of having problems with their children, 7 of the 12 PSYS items (i.e. Communication, Relationship, Overall Happiness, Reaction to My Redirection or Punishment, Family Involvement, Household Chores, and School/Educational Activities) were negatively related to CAPI Problems with Child scores. Mothers reporting lower satisfaction within specified satisfaction areas are more likely to have increased problems (e.g. “I have a child who is bad.”, “I have a child who gets into trouble a lot.”) with their children compared to mothers who rate higher in satisfaction.

Of interest was that ECBI Intensity and Problem subscales did not exhibit significant correlations with child maltreatment potential. This would suggest that high or low levels of problematic child behavior, as per the ECBI, are not indicative of child maltreatment potential. However, it should be noted that since the ECBI is designed only for children age two years and older, there was a restraint on the sample size used for
analysis, as many of the participants were not administered this measure. The ECBI subscales did however, exhibit significant positive correlations with problems with children. Thus, mothers reporting a higher number and/or intensity of problematic behaviors also endorsed having more problems with their children as per the CAPI. As the Problems with Child subscale is significantly associated with the Abuse score it is suspected that mothers experiencing increased problems with their children, as per the CAPI, may be at a greater risk of maltreating their children. These results appear to be evidence of convergent validity between ECBI subscales and the CAPI Problems with Child subscale.

Predicting Risk for Child Maltreatment with Measures of Parental Satisfaction

In an attempt to demonstrate that parental satisfaction measures could be a useful tool in predicting child maltreatment potential, a series of regressions were conducted with various satisfaction items that had exhibited a relationship to child maltreatment potential. The first model examined items that could be used to rate children of any age including: satisfaction with communication, relationship, and reaction to praise/rewards. Individual items were not significant and were not capable of predicting child maltreatment potential. A second model examined satisfaction items that were specific to children older than 18 months, including: following household rules and satisfaction with school/educational activities. However, this model was also non-significant and the items were not capable of predicting child maltreatment potential. Although satisfaction items were shown to be related to child maltreatment potential they were unable to be successfully used to predict child maltreatment potential. This may have been due to a number of reasons including power, collinearity, and specificity of satisfaction items.
Overall happiness was examined individually, as it was expected to be an overall measure of parental satisfaction. Results indicated that participants’ ratings of overall happiness were shown to be a predictor of child maltreatment potential. Specifically, mothers who had higher overall happiness ratings were at a lower risk of maltreating their children while mothers with low overall happiness ratings were at a higher risk of maltreating their children. A final step-wise multiple regression analysis indicated that satisfaction with communication and satisfaction with parent-child relationship were significant, albeit weak predictors of child maltreatment potential. Mothers exhibiting lower satisfaction with how their children communicate with them were at a higher risk of maltreating their children and the inverse was also true. A similar finding was also observed for mothers exhibiting lower satisfaction with the relationship they had with their children. Although all previous analyses focused on the range of abuses scores, scores can also be used with a standardized cutoff, thereby classifying responses into low or high risk for child maltreatment.

CAPI Abuse scores range from low to high, with higher values indicating a higher risk to maltreat a child. CAPI Abuse scores of 166 are used for the purposes of detecting abusers and are regarded as an optimal overall cut off score. Scores of 215 are used to identify the upper 5% of abusers which will yield twice as many false negatives as false positives and is a more conservative method (Milner, 1986). Participants who meet or exceed these cutoff scores are at a high risk of child maltreatment potential. In order to determine how well parental satisfaction items could predict classification of high risk or low risk child maltreatment potential, satisfaction items demonstrating a significant relationship with CAPI Abuse scores were used to conduct a logistic regression. Mothers
with CAPI Abuse scores of 166 and above were classified as high risk, while mothers with scores below 166 were classified as low risk. Results indicated that satisfaction with the parent-child relationship was able to significantly predict classification of child maltreatment potential risk. Specifically, decreased satisfaction with the parent-child relationship increased the likelihood of high risk child maltreatment potential. Further, 71% of those who met high risk child maltreatment potential criteria were accurately classified and 82% of those who did not meet high risk child maltreatment potential criteria were accurately classified. Based on the primary analyses it appears that satisfaction with the parent child relationship was the most significant predictor of child maltreatment potential with increased relationship satisfaction acting a protective factor against child maltreatment.

Influence of Socially Desirable Responding

Because the primary analyses only lent minimal support to stated hypotheses, the CAPI Lie subscale was examined in order to examine the influence of social desirability. Since the population of interest was referred to the study based on substance use and child neglect it was suspected that participants may respond to measures in a socially desirable manner. However, it was initially expected that the CAPI Lie subscale would not exhibit a significant linear relationship with PSYS items or ECBI subscale scores, thereby indicating these items/scales are not associated with social desirability. Upon examination CAPI Lie scores were positively associated with PSYS items. Interestingly, the results indicated that all satisfaction items were associated to social desirability such that participants reporting higher satisfaction also rated higher in social desirability. However, ECBI subscales were not found to be associated with social desirability. Thus,
mothers’ indication of child behavior problems does not appear to be related to socially desirable responding. Based on the influence of social desirability additional retrospective analyses were conducted. Partial correlations were performed to remove the association of the CAPI Lie subscale when examining child maltreatment potential. However, there were no significant associations between parental satisfaction items and child maltreatment potential when accounting for social desirability. Due to the positive association between social desirability and parental satisfaction items, the relationship between child maltreatment potential and parental satisfaction could not be reliably examined. Although the previous correlational analysis indicated that as parental satisfaction increased, child maltreatment potential decreased, this may have been influenced by socially desirable responding. Mothers presenting themselves in a more socially desirable manner may inflate their satisfaction scores and diminish their abuse scores. Also of interest was that distribution of abuse scores within the sample was positively skewed thereby potentially reducing the number of participants meeting abuse score cutoffs.

The CAPI Problems with Child subscale was also examined to determine if it was affected by socially desirable responding. Partial correlations revealed that socially desirability did not affect the relationship between mothers’ satisfaction with children following household rules and satisfaction with their children’s school/educational activities. Specifically, mothers with lower satisfaction in these areas exhibited increased problems with their children. This would appear to indicate that the CAPI Problems with Child subscale is less influenced by socially desirable responding than the CAPI Abuse
scale; as might be expected due to potential stigma and legal concerns associated with child maltreatment.

The majority of mothers referred into the study were either under investigation (44%) by CPS for child neglect or had a current substantiated case of neglect (44%). Based on analysis of the CAPI Lie scale and characteristics of the sample a retrospective hypothesis was formed. It was expected that mothers who were being investigated by CPS at the time of their referral and assessment would be much more likely to respond in a socially desirable manner based on the potential for them to lose custody of their child(ren) and other legal concerns. These difficulties could potentially lead participants to exhibit less trust with test administrators and thereby respond in socially desirable manner. Mothers who had an open case were suspected to respond in a less socially desirable manner since they had already gone through an investigation and had lost current custody of their child(ren), thus they may have felt they had less to conceal.

It was expected that mothers under investigation for child neglect would exhibit lower rates of child maltreatment potential and higher rates of satisfaction and social desirability, due to increased pressure to respond in a socially desirable manner. Results indicated no significant differences between the groups. However, it should be noted that within the entire sample, mean CAPI Lie scores ($M = 6.9$, $SD = .43$) were close to the designated cutoff (i.e. 8). Scores at or above this cutoff indicate that other CAPI subscales may be invalidated or need to be interpreted with caution (Milner, 1986). Regardless of case disposition, many mothers presented themselves in a socially desirable manner. Donohue and Van Hasselt (1999) found similar results in a population of parents involved in a treatment program for child maltreatment, showing that most participants
exhibited highly elevated CAPI Lie scores. To further understand the influence of social desirability on parental satisfaction, participants who meet or exceed the Lie scale cutoff could be grouped together or removed from subsequent analyses due to invalid responding. When examining whether Socially Desirable Responders (i.e. Lie scores ≥ 8) biased their responses compared to participants who responded in a valid manner, group differences were apparent. Participants who responded in a socially desirable manner inflated their parental satisfaction ratings while reducing their child maltreatment potential and problems with children scores compared to participants who responded in a more valid manner. When Spearman correlations were reexamined, retrospectively removing participants above the Lie scale cutoff, there was a significant negative relationship between CAPI Abuse scores and Overall Happiness ratings. Thus, for participants not suspected of responding in a socially desirable manner, decreases in overall happiness with their children was associated with increased child maltreatment potential. These retrospective analyses were beneficial in exhibiting the effects of social desirability on parental satisfaction and child maltreatment potential in a population of substance abusing neglectful mothers. Examining a population such as the one included in this study certainly presents challenges to the interpretation of data.

Limitations

Limitations of the study include sample characteristics and specificity of measures. As previously stated the population of interest may have experienced pressure to respond in a socially desirable manner due to the potential legal implications of their behavior. Another limitation is the age range of the sample. More than 50% of the children in the study were two years old or younger, with a third of the sample being four
months old or younger. It is possible that mothers of infants may not have had enough
time with their child to determine satisfaction; especially in the case of mothers who have lost custody of their child. Moreover, there are less areas to measure satisfaction when rating a younger child due to their limited abilities and behavior; hence the structure of the modified PSYS. Additional research is needed in the area of parental satisfaction among parents with infants. Since many of the satisfaction items of the modified PSYS were intended for older children there may have been a lack of data to accurately conduct the aforementioned analyses thus resulting in lack of power. The same could also be said for the ECBI as it is intended for children two years and older. To this end, future research should focus on including a larger sample with a broader range of different aged children and potentially a control group of participants not suspected of child maltreatment for comparison. Further, future research should focus on incorporating additional measures of response validity and determining how socially desirable responding influences self-reporting of parental satisfaction.

Conclusion

In summary, it appears that parental satisfaction has limited utility in predicting child maltreatment potential in mothers who are reported to CPS Agencies. Due to the legal concerns that parents face regarding child maltreatment it is difficult to ascertain whether parents are being honest in their reporting of satisfaction. It was hoped that the modified PSYS could be used in place of longer and more face valid measures (i.e. CAPI). Contrary to the researcher’s belief, parental satisfaction is just as susceptible to socially desirable responding as measures of child maltreatment. With regard to child behavior problems, it was believed that mothers’ would be less likely to report a high
number of behavior problems or high intensity of problems due to a potential for stigma regarding parenting. However, there was no relationship between behavior problem frequency or intensity when examining socially desirable responding. Further, although previous research has found a relationship between behavior problems and child maltreatment potential the current study was unable to find similar results (e.g. Mammen, Kolko, & Pilkonis, 2003; McElroy & Rodriguez, 2008). Although, reporting of problematic child behaviors was not influenced by social desirability it was not capable of distinguishing between mothers who were at a higher risk of child maltreatment potential.

When measuring constructs that are closely related to issues regarding child maltreatment it is important to consider the nature of the population being observed. Previous research has found conflicting results with regard to how child behavior problems and parental satisfaction are related to child maltreatment. It is highly probable that issues regarding the population of interest and limitations of the study affected results. Clinical implications of this study suggest that it is extremely important to include measures of validity to determine if participants are attempting to present themselves in a socially desirable manner when reporting their parental satisfaction and child maltreatment risk; especially when dealing with participants who are not only at risk of legal problems related maltreating children but also legal problems related to substance use.
TABLES

Table 1

*Parent Satisfaction with Youth Scale and Child Abuse Potential Inventory Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Measures</th>
<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td>PSYS; family involvement</td>
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<tr>
<td>PSYS; school and education activities</td>
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<td>PSYS; safety skills</td>
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<td>PSYS; reaction to my redirection or punishment</td>
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<tr>
<td>PSYS; compliance</td>
<td>68.86</td>
<td>26.43</td>
</tr>
<tr>
<td>PSYS; following household rules</td>
<td>68.44</td>
<td>28.99</td>
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<td>CAPI Abuse Subscale</td>
<td>160.74</td>
<td>104.42</td>
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<td>CAPI Problems with Child Subscale</td>
<td>4.16</td>
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<td>CAPI Lie Subscale</td>
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<td>Eyberg Intensity Subscale</td>
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<td>36.28</td>
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<td>Eyberg Problem Subscale</td>
<td>11.94</td>
<td>8.49</td>
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*Note: PSYS: Parent Satisfaction with Youth Scale; CAPI: Child Abuse Potential Inventory.*
Table 2

*Shapiro-Wilk Test of Normality for Participant Scores on the PSYS, CAPI, and Eyberg*

<table>
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<th>Measures</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
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<td>PSYS; communication</td>
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<td>&lt;.001</td>
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<tr>
<td>PSYS; relationship</td>
<td>.69</td>
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<td>&lt;.001</td>
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<tr>
<td>PSYS; reaction to my praise rewards and attention</td>
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<td>43</td>
<td>&lt;.001</td>
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<tr>
<td>PSYS; overall happiness</td>
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<td>43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>PSYS; compliance</td>
<td>.89</td>
<td>43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>PSYS; reaction to my redirection or punishment</td>
<td>.89</td>
<td>43</td>
<td>.001</td>
</tr>
<tr>
<td>PSYS; following household rules</td>
<td>.89</td>
<td>43</td>
<td>.001</td>
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<tr>
<td>PSYS; family involvement</td>
<td>.70</td>
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<tr>
<td>PSYS; safety skills</td>
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<td>&lt;.001</td>
</tr>
<tr>
<td>PSYS; household chores</td>
<td>.88</td>
<td>43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>PSYS; school and education activities</td>
<td>.86</td>
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<td>&lt;.001</td>
</tr>
<tr>
<td>CAPI Abuse Subscale</td>
<td>.94</td>
<td>43</td>
<td>.019</td>
</tr>
<tr>
<td>CAPI Lie Scale</td>
<td>.96</td>
<td>43</td>
<td>.090</td>
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<tr>
<td>CAPI Problems with Child Subscale</td>
<td>.83</td>
<td>43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Eyberg Intensity Subscale</td>
<td>.96</td>
<td>36</td>
<td>.164</td>
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<tr>
<td>Eyberg Problem Subscale</td>
<td>.92</td>
<td>36</td>
<td>.011</td>
</tr>
</tbody>
</table>

*Note: PSYS: Parent Satisfaction with Youth Scale; CAPI: Child Abuse Potential Inventory.*
Table 3

The Relationship between Child Abuse Potential and Parental Satisfaction Utilizing Spearman Correlations Items

<table>
<thead>
<tr>
<th>PSYS; Communication</th>
<th>CAPI Abuse</th>
<th>CAPI Problems with Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman</td>
<td>-.24*</td>
<td>-.21</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>PSYS; Relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.30**</td>
<td>-.23*</td>
</tr>
<tr>
<td>N</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>PSYS; Reaction to my praise rewards and attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.24*</td>
<td>-.13</td>
</tr>
<tr>
<td>N</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>PSYS; Overall happiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.29**</td>
<td>-.30**</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>PSYS; Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.24</td>
<td>-.22</td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>PSYS; Reaction to my redirection or punishment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.21</td>
<td>-.30*</td>
</tr>
<tr>
<td>N</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>PSYS; Following household rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.29</td>
<td>-.31*</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>PSYS; Family involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.29</td>
<td>-.27</td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>PSYS; Safety skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.25</td>
<td>-.16</td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>PSYS; Household chores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.18</td>
<td>-.30*</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>PSYS; School and education activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman</td>
<td>-.35*</td>
<td>-.29</td>
</tr>
<tr>
<td>N</td>
<td>43</td>
<td>43</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).**
### Table 4

*The Relationship between CAPI Subscale scores and Child Behavior Problems Utilizing Pearson Correlations*

<table>
<thead>
<tr>
<th>CAPI Abuse Subscale</th>
<th>CAPI Problems with Child Subscale</th>
<th>Eyberg Intensity Subscale</th>
<th>Eyberg Problem Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.43** (N=82)</td>
<td>.16 (N=36)</td>
<td>.21 (N=36)</td>
</tr>
<tr>
<td>CAPI Problems with Child Subscale</td>
<td>.48** (N=36)</td>
<td>.46** (N=36)</td>
<td></td>
</tr>
<tr>
<td>Eyberg Intensity Subscale</td>
<td></td>
<td>.83** (N=36)</td>
<td></td>
</tr>
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</table>

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

### Table 5

*The Influence of Parental Satisfaction Items on Child Abuse Potential Utilizing Multiple Regression Analysis*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 (All Ages)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>.07</td>
<td>.68</td>
</tr>
<tr>
<td>Relationship</td>
<td>-.28</td>
<td>.16</td>
</tr>
<tr>
<td>Reaction to attention, praise, rewards</td>
<td>-.16</td>
<td>.41</td>
</tr>
</tbody>
</table>
Table 6

*The Influence of Parental Satisfaction Items on Child Abuse Potential Utilizing Hierarchical Step-Wise Regression*

<table>
<thead>
<tr>
<th>Models</th>
<th>$b$</th>
<th>$p$</th>
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</thead>
<tbody>
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<td>Model 1</td>
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<tr>
<td>Communication</td>
<td>-.24</td>
<td>.04</td>
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<tr>
<td>Model 2</td>
<td></td>
<td></td>
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<tr>
<td>Communication</td>
<td>.04</td>
<td>.81</td>
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<tr>
<td>Relationship</td>
<td>-.38</td>
<td>.01</td>
</tr>
<tr>
<td>Model 3</td>
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<td></td>
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<tr>
<td>Communication</td>
<td>.07</td>
<td>.68</td>
</tr>
<tr>
<td>Relationship</td>
<td>-.28</td>
<td>.16</td>
</tr>
<tr>
<td>Reaction to attention, praise, rewards</td>
<td>-.16</td>
<td>.41</td>
</tr>
<tr>
<td>Model 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>.10</td>
<td>.57</td>
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<tr>
<td>Relationship</td>
<td>-.27</td>
<td>.18</td>
</tr>
<tr>
<td>Reaction to attention, praise, rewards</td>
<td>-.10</td>
<td>.66</td>
</tr>
<tr>
<td>Overall Happiness</td>
<td>-.11</td>
<td>.60</td>
</tr>
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</table>

Table 7

*Determining the Influence of Behavior Problems on Child Abuse Potential Using Multiple Regression Analysis*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$b$</th>
<th>$p$</th>
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</thead>
<tbody>
<tr>
<td>Model 1</td>
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<td></td>
</tr>
<tr>
<td>Eyberg Intensity Subscale</td>
<td>.01</td>
<td>.97</td>
</tr>
<tr>
<td>Eyberg Problem Subscale</td>
<td>.18</td>
<td>.51</td>
</tr>
</tbody>
</table>
Table 8

The Relationship between CAPI Lie Subscale Scores and Parental Satisfaction Utilizing Spearman Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>CAPI Lie Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYS; Communication</td>
<td>0.26* (N = 80)</td>
</tr>
<tr>
<td>PSYS; Relationship</td>
<td>0.45** (N = 79)</td>
</tr>
<tr>
<td>PSYS; Reaction to my praise rewards and attention</td>
<td>0.32** (N = 79)</td>
</tr>
<tr>
<td>PSYS; Overall happiness</td>
<td>-0.30** (N = 80)</td>
</tr>
<tr>
<td>PSYS; Compliance</td>
<td>0.34* (N = 44)</td>
</tr>
<tr>
<td>PSYS; Reaction to my redirection or punishment</td>
<td>0.21 (N = 46)</td>
</tr>
<tr>
<td>PSYS; Following household rules</td>
<td>0.38* (N = 45)</td>
</tr>
<tr>
<td>PSYS; Family involvement</td>
<td>0.45** (N = 44)</td>
</tr>
<tr>
<td>PSYS; Safety skills</td>
<td>0.29 (N = 44)</td>
</tr>
<tr>
<td>PSYS; Household chores</td>
<td>0.16 (N = 45)</td>
</tr>
<tr>
<td>PSYS; School and education activities</td>
<td>0.49** (N = 43)</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).
REFERENCES


VITA

Graduate College
University of Nevada, Las Vegas

Kelsey Michael Bradshaw

Degrees:
  Bachelor of Science, Psychology, 2006
  University of Idaho

  Master of Arts, Psychology, 2009
  San Diego State University

Special Honors and Awards:
  Board of Regents Program Award (2009)
  Graduate College McNair Scholarship (2008)
  Ronald E. McNair Post-Baccalaureate Achievement Program (2004)

Publications:
  Donohue, B., Allen, D.N., Romero, V., Hill, H., Vasaeli, K., Lapota, H., Tracy, K.,
  Gorney, S., Abdel-al, R., Caldas, D., Herdzik, K., Bradshaw, K., Valdez, R.,
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  implementation of an evidence-based treatment. Behavior Modification, 33(4),
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  substance abuse: a review of its intervention components and applicability.
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  Bradshaw, K.M. (2009). On the dimensionality of the proactive coping
  inventory: 7, 5, 3 Factors? Anxiety, Stress, and Coping An International

Thesis Title: The Relationship of Child Maltreatment Potential and Mothers’ Satisfaction
with Their Neglected Children

Thesis Examination Committee:
  Chairperson, Bradley Donohue, Ph.D.
  Committee Member, Daniel Allen, Ph.D.
  Committee Member, Murry Millar, Ph.D.
  Graduate Faculty Representative, Chad Cross, Ph.D.