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Differences in Parental Expectations and Interactions of African American Mothers with a History of Substance Dependence

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DIFFERENCES IN PARENTAL EXPECTATIONS AND INTERACTIONS OF AFRICAN
AMERICAN MOTHERS WITH A HISTORY OF SUBSTANCE DEPENDENCE

by

AYANA N. PERKINS

Under the Direction of Dr. James Emshoff

ABSTRACT

Substance dependency can affect a mother's health and her ability to parent. A cross sectional study was implemented to better understand resources of African American mothers in recovery from substance dependence. A convenience sample of 38 African American mothers at two drug treatment centers in Atlanta, Georgia completed the Michigan Screening Profile of Parents (Helfer, Hoffmeister, & Schneider, 1978). Results indicated that women who perceived that their emotional needs were being met were less likely to use maladaptive coping skills. Mothers who used less maladaptive coping skills were less likely to report negative interactions with their children. Results have implications for the needs of African Americans mothers in substance abuse treatment. Follow up studies may benefit from the use of longitudinal and qualitative research methods in order to comprehensively explain the impact of lifetime social supports on maladaptive coping and negative parenting behaviors for African American mothers in recovery.

INDEX WORDS: Substance dependence, Parenting, Coping, Relationship with parents, Interactions with children, Expectations of children

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AYANA PERKINS

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

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Georgia State University

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CHAPTER 1.

INTRODUCTION

An estimated 19.9 million Americans, ages 12 or older, reported using illicit drugs in the past 30 days (Substance Abuse and Mental Health Services Administration [SAMHSA], 2008). Approximately eight percent of African American women reported needing substance abuse treatment in the past year (SAMHSA, 2007). African American mothers are a high-risk group for substance dependency (Dunlap, 1992; Jones and Ford, 2008). In addition to environmental factors such as poverty (Sharpe, 2005), various complications in psychological and lifetime social support experiences contribute to the challenges that negatively impact the lives of African American mothers such as not addressing their emotional needs (Dunlap, Johnson, Sanabria, & Sturzenhofecker, 2004; Dunlap, E., Sturzenhofecker & Johnson, 2006). These challenges often lead to maladaptive coping responses including substance use.

The health of mothers is directly related to the health of their children. Choosing a maladaptive coping response like substance abuse affects a mother's health and her ability to parent (Klee, Jackson, & Lewis, 2002). Children of chemically dependent parents are more susceptible to later substance abuse in their adulthood (Bavolek, 1989; Dunlap, 1992; Emshoff & Price, 1999). Their children's increased vulnerability to substance abuse explicates the importance of focusing on the parenting behaviors of African American mothers with a history of chemical dependence.

In exploring parenting behaviors of African American mothers with a history of substance dependency, it is important to note that diversity in parenting behaviors exists in this population of African American mothers similar to other parent populations. Mothers with a history of substance dependency are often more stigmatized for their use than fathers with a

similar history of abuse (Body, 2004). Identifying appropriate resources is a critical need for the recovery of African American mothers even if there are not complications in their parenting behaviors. Moreover, delineating how these factors synergistically contribute to substance use could provide answers on how to strengthen families when developing effective drug prevention and recovery programs for African American mothers.

Human beings have emotional needs in addition to their basic physiological needs (Maslow, 1999). Jones and Ford (2008) assert that when the emotional needs of African American women are not met, they can become vulnerable to health crises. Substance dependence is an example of a health crisis that can occur among African American mothers when their emotional needs are not met (Jones & Ford, 2008). Drawing on the resources of beneficial social relationships could satisfy some emotional needs of African American mothers.

African American mothers often report being supported by their relationship with their own parents when responding to the rigors of parenthood. African American mothers' willingness to seek assistance from their parents could be evidence of a healthy attachment to their parents. Bowlby (1988) asserts that healthy attachments formed in childhood from a positive relationship with a parent or adult caregiver can lead to competence and psychological health. A mother who can internalize benefits of early developmental support from their healthy attachment to their own parents may develop a sense of resilience (Bowlby, 1986). This sense of resilience could guide future parenting choices.

African American mothers may not necessarily require a positive connection with their own parents to fulfill their emotional needs. Social support from other significant individuals can reinforce resilience and encourage mothers to choose positive parenting choices even if they have not received this type of emotional care giving from their own parents (McKelvey,

Fitzgerald, Schiffman, & Von Eye, 2002). Social support from a primary caregiver or another significant person is helpful during a mother's early developmental period and during her experience as a parent. Social supports can reaffirm for a mother their sense of worth and this internalized value may inspire mothers to cope more effectively with the rigors of parenthood (Rangarajan, 2008).

Social support is documented in the literature as a predecessor to the use of positive coping strategies (Procidano & Heller, 1983; Quittner, Glueckauf, & Jackson, 1990). Harmers, Sanderson, & Mertin (1999) have argued that the absence of social support for substance dependent mothers will decrease use of beneficial coping methods that would assist in managing stress associated with parenting.

African Americans mothers who lack positive social support are at risk for poor mental health, which is a precursor to maladaptive coping (Harmers, et. al, 1999). African American mothers who use illicit substances attenuate the potential positive outcomes of a supportive social network. Substance abuse can lead to social isolation because preoccupation with obtaining the addictive substance may interfere with maintaining beneficial social support networks. (Carver, Scheier, & Weintraub, 1989). It is critical to understand whether or not the indicators of lifetime social supports such as positive relationship with parents, having emotional needs met, and appropriate coping strategies, have any influence on parenting behaviors like expectations and interactions when addressing recovery from addiction.

Few research studies have explored the differences in social supports and coping skills of African American mothers with a history of dependency, and how these factors translate into parenting behaviors. More studies target the weaknesses of chemically dependent mothers than

existing strengths. However, it is highly likely that strengths may still be presenting even with a history of substance dependence.

This research will use a path analytic statistical model to examine the strength of the relationship between lifetime social supports (positive relationship with parents and inability to meet emotional needs) and parenting behaviors (inappropriate expectations of children and negative interaction with children). It is expected that this relationship between social supports and parenting behaviors is mediated by the quality of coping skills possessed by a mother with a history of chemical dependency.

CHAPTER 2.

LITERATURE REVIEW

General Overview

This thesis will examine a mediation model that explores how distal influences (mothers' positive relationship with their own parents and perceptions of having their emotional needs met) are associated with parenting variables (inappropriate expectations of children and negative interaction with children). The association between the distal influences and parenting variables is expected to be mediated by maladaptive coping skills. It is expected that if present, a mother's maladaptive coping behavior will also be independently related to inappropriate expectations children and to an increased likelihood of negative interactions with children.

Rationale for Terms Used in This Text

Dependence, Abuse or Addiction. 'Chemical dependence,' 'substance dependence,' and 'substance abuse,' and 'addiction' are the key terms used in this document to describe uncontrolled use or dependency of illicit chemical substances. Chemical or substance dependence is defined by the Diagnostic and Statistical Manual of Mental Disorders-Text Revised (DSM-IV) (American Psychiatric Association, 2000, p. 197) as "a maladaptive pattern of substance use leading to clinically significant impairment or distress in three or more areas such as social, legal, or vocational." Substance abuse is defined by the DSM-IV-TR (2000, p. 199) as "a maladaptive pattern of substance use leading to clinically significant impairment or distress" with the experience of one or more challenges resulting from the abuse. The Substance Abuse and Mental Health Services Administration (SAMHSA) often collapses the use of dependence or abuse by focusing on the shared symptomatology of both terms such as withdrawal, tolerance, and the existence of challenges in some area of the individual life

(occupation, legal, family, etc) (Office of Applied Studies, 2006). Addiction is not operationally defined under the current DSM-IV-TR but was included in earlier editions (Kranzler & Li, 2008). Drug addiction characterizes the more uncontrolled impulse and relapse of its chronic use while encountering challenges from this chronic use (Kranzler & Li, 2008).

The African American Female

Policy. Illicit drug use has had a greater negative impact on ethnic minority communities and gendered populations like African American mothers (Sharpe, 2005). Many ethnic minority communities that experience higher rates of poverty have greater access to illicit drugs (Nowlin & Colder, 2007). Indigent communities attract drug trafficking since the disorderliness of neighborhoods complicate the ability of law enforcement to prevent this crime from flourishing (Sharpe, 2005). Poverty also encourages community residents to seek out the financial opportunities that illegal drug trafficking provides (Nowlin & Colder, 2007). More severe sentencing is applied to users of illicit substances obtained illegally in street markets (Human Rights Watch; May 2008) than illegally acquired or re-sold prescription drugs. These disparities in sentencing practices are discriminatory toward more impoverished populations. Impoverished populations encounter more severe legal sentences due to their greater access to an illicit drug rather than an unlawfully- acquired prescribed substance (Body, 2004). Additionally, low income African American mothers who test positive for an illicit substance were more likely to be vilified and subject to the removal of their child from their custody than their White American counterparts who illegally acquire and abuse a prescribed medication (Body, 2004; Zerai & Banks, 2002). The reporting requirements of public health care facilities have influenced many African American mothers not to seek prenatal care as a means of avoiding imprisonment (Zerai & Banks).

Prenatal exposure to alcohol, tobacco, and other mood enhancing drugs is also a salient policy issue for African American mothers because a pregnant mother's substance dependence has been treated as neglect towards her born and prenatal custodial children (Zerai & Banks, 2002). This policy has been most often applied in public health care settings that have been more often used by substance dependent African American mothers. Drug exposure and lack of prenatal care can increase risk for miscarriage, preterm birth, or delivery of a child with significant health challenges (Sharpe, 2005). However, Zerai and Banks (2002) argue that most negative health outcomes for babies born to chemically dependent African American mothers are related more to poor prenatal care than to drug exposure.

Stigma and Substance Use. The woman's traditional role as primary caregiver is a contributor to stigma for substance use despite the significantly higher rates found in men (Body, 2004). Particularly with crack cocaine, African American chemically dependent mothers can become ostracized in their neighborhoods if their abuse becomes publicly known. A pariah status increases the vulnerability of chemically dependent African American women to sexual and physical abuse (Sharpe, 2005). The children of these chemically dependent mothers can also become negatively affected if their physical appearance (e.g., unclean clothing) suggests that their mother is unable to effectively parent (Sharpe, 2005).

Culture of Self Sacrifice. Poverty often places African American women in a social position where she must sacrifice her own needs and desires for the survival of her family. Ignoring emotional needs and other types of self sacrifice are common issues for African American women seeking psychotherapy treatment (Jackson & Greene, 2000). Daughters born into households with limited financial resources are more likely to assume some of the parental responsibilities based on gender and birth order (i.e., being the oldest sibling) (Godsall, Jurkovic,

Emshoff, Anderson, & Stanwyck). Self-sacrifice is commonly perceived as strength (Harris-Lacewell, 2001). A more balanced version of African American womanhood is encouraged that does not compromise quality of health (Harris-Lacewell, 2001). African American female scholars (Jackson & Greene, 2000) have acknowledged the sociopolitical reality of African American women may not allow for the complete elimination of self sacrificing behaviors. However, the discovery of resources (i.e. social supports) that prevent health crises or aid during challenging circumstances could reduce the amount of self sacrifice. Family and non sanguine support networks are frequently cited cultural resources for African Americans (Jayakody, Chatters, & Taylor, 1993; Marshall, Noonan, McCartney, Marx, & Keefe, 2001). Family support is a recommended strength based strategy for substance abuse treatment programs that serve African American mothers (Roberts et al., 2000). The use of mutually beneficial and respectful family support could also assist those African American mothers in recovery that have a tendency to self sacrifice.

Factors Influencing a Parent's Ability to Cope

Parenting Relationship. Positive relationships with parents can promote psychological well-being (Bowlby, 1986). A mother's relationship with her own parents provides clues to how her perceptions will be shaped (Travis & Combs-Orme, 2007). Bowlby (1977) examined the impact of a strong bond with one's own parent to later influence future parenting behavior in his attachment theory. This theory implies that children raised in a fashion where they have their emotional needs met were more likely to exhibit healthier psychological behavior.

George Albee (1996) stated that people who grow up feeling secure, loved, and safe have lower rates of both physical and mental disorders. Albee often promoted the development of prevention programs involving nurturing home environments for children (Albee, 1980; 1996;

1999). Albee's approach is consistent with Wallace and Fisher (2007) finding that a person's relationship with parents is a stronger predictor of substance use than the environment alone. A positive parental relationship has also been shown to act as a buffer against undesirable influences that could impair the healthy functioning of an individual (Longfellow, Zelkowitz, & Saunders, E. 1982; Myers, Taylor, Arrington, & Richardson, 1992; Pillemer & McCartney, 1991).

The quality of a parent-child relationship can influence the development of healthy ego identity. A positive parent-child relationship can lead to ego resilience for the child. Ego resilience (Block & Block, 1980) occurs from a warm supportive parenting experience where the offspring learn to confidently respond to the changing environment and even adapt (i.e., cope) (Buckley & Borden, 2007) when the situation exceeds their resources (i.e., stress.) Children without such a positive experience with parent (s) may develop ego brittleness- an ego identity perception that limits their ability to perform competently and cope with the changing needs of their environment. (Block & Block). Adults with a weak attachment with their own parents can still become ego resilient if these offspring can utilize their own life lessons as a guide and learn to get their emotional needs met from other sources (Wahler & Castlebury, 2002).

A positive parenting relationship remains influential into adulthood. Adolescents frequently report that their parents are the most important influence on their behavior (Knyazev, 2004). A similar result was also found in the work of Krishnakumar and Black (2004) who found that African American adolescent mothers who had a positive relationship with their own mothers were more resistant to external malevolent influences. Another example of the influence of positive parental relationship was identified in Darling, McWey, Howard, and

Olmstead (2007) study of college students. Female college students were more dependent on their parents for emotional support than a romantic partner (Darling et. al, 2007).

Studies have indicated that positive parent-child experiences are correlated with coping. For example, Travis' and Comb-Orme (2007) examined the transference of mothers' relationship with their own parents into the interaction with their own children. The authors identified four types of mothers: 1) Mothers with a positive attachment with their own parents and effective coping skills (positive-adaptive), 2) mothers without a positive attachment with their own parents but still exhibiting effective coping skills (resilient), 3) mothers with a positive attachment with their own parents but with maladaptive coping skills (positive-maladaptive), and 4) mothers without a positive attachment to their own parents and with maladaptive coping skills (vulnerable) (Travis' and Comb-Orme, 2007). The resilient group of mothers was the primary focus of this article. The authors found that resilient mothers did not have positive attachments with their own parents but managed to demonstrate effective coping skills and displayed positive interaction with their infants. The behaviors of the resilient group suggest that other human resources could satisfactorily meet the emotional needs allowing the mother to develop an ego resilient personality that would contribute to her positive functioning as a parent. The positive maladaptive group of parents includes the group of mothers who described a healthy attachment to their own parents but were unable to parent effectively to their own infants (maladaptive). The functioning of this maladaptive group indicates that positive attachment cannot always predict future behavior and that other factors influence our behavior as adults (e.g. parenting behavior). The fourth group was labeled the vulnerable group as they had a poor attachment to their own parents and did not adequately adjust to mothering their new infant. This fourth group provides some support for Bowlby theory (1977) and may even suggest ego brittleness (Block &

Block, 1980) , which has also been related to poor attachment to one's parent (Travis & Combs-Orme, 2007). To avoid ego brittleness, mothers without parental support could also draw on social support from other important people in their lives. Using social support from important others could also improve coping skills of vulnerable mothers in a way that contributes to their ability to maintain positive interactions with their children and appropriate expectations for them.

Emotional Needs. Bowlby's attachment theory (1977) suggests that having emotional needs met can influence positive beliefs about oneself and are normally established by a balanced positive attachment with a parental figure. Having emotional needs met and a positive relationship with parent can be used as an internal resource that can serve as a buffer against maladaptive parenting (Travis & Combs-Orme, 2007). According to Lazarus and Folkman (1984) work in coping, social supports can serve as a coping resource, prompting an individual to choose more effective coping. These types of supports vary in their utility. Some mothers draw on their social networks to fulfill certain emotional needs such as venting or problem solving (Sgarbossa & Ford-Gilboe, 2004). Other mothers receive resources such as financial assistance, free housing or child care assistance (Jayakody et. al, 1993). The majority of African American mothers' social supports centered on emotional needs in Jayakody et al study (1993) of marital status and types of social support. Social supports are helpful resources in responding to the internal or external stressors in their life.

Throughout the lifespan, humans' emotional needs are met through significant others' ability to offer them love, empathy, and assistance. As a child, these emotional needs are typically met through the parents (Bowlby, 1977). In adulthood, these emotional needs can be satisfied through a social support network. This network acts as another buffer against life challenges (Myers, Taylor, Arrington, & Richardson, 1992). Parenthood is often overwhelming,

but the presence of a social support system can produce a psychological climate that encourages healthy interaction with their children (Myers et al, 1992). People meet their own emotional needs through establishing functional boundaries between themselves and others (Hogg & Frank, 1992). Addiction weakens these functional boundaries and limits the utility of these social support networks. The addict's preoccupation with maintaining her psychological mood will leave few opportunities to nurture mutually supportive relationships (Ratner, 1993). Chemically dependent mothers may decrease the size of their support networks if the cycle of addiction becomes so extreme that they exhaust their support network (Sharpe, 2005). The loss of the nurturing social support network may be more devastating for the chemically dependent African American woman. The African American woman is a member of a vulnerable population group with limited access to resources; therefore, the loss of a social network could affect her potential to thrive.

Coping

Coping Effects. Lazarus and Folkman (1984) define coping as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141). The authors (Lazarus & Folkman, 1984) delineate two broad dimensions of coping: 1) Problem focused or, 2) emotion focused. Individuals who use problem focused coping concentrate on removing the stressful stimuli from their environment as seen in removing oneself from a stressful situation. Individuals who use emotion focused coping adopt techniques that regulate their emotional response to external stimuli. Carver et al. (1989) later expanded Lazarus and Folkman's coping model to include a third style of coping: maladaptive coping. Maladaptive coping behavior includes mental disengagement, denial, behavioral disengagement, venting, and alcohol and drug

disengagement (Carver, et. al, 1989). Mental disengagement describes refocusing attention on other activities to avoid a particular stress. Denial characterizes behavior that prevents acknowledgement of a stressor. Behavioral disengagement involves the decision to release responsibility for a problem. Venting involves communicating how one feels about a particular stressor but without taking action to eliminate problem or feelings towards the stressor. Alcohol and drug disengagement describes an individual use of alcohol or drugs to improve their mood.

Substance abuse is often the long term outcome of maladaptive coping attempts (Sharpe, 2005) and is considered a maladaptive coping behavior (Carver et. al, 1989). Substance abuse also independently influences coping because chemically- dependent people often use their drug's (alcohol, tobacco and other drug) pharmacological influence to internally mediate their response to internal or external stimuli (Battaglia, 2008). Their drug of choice becomes a coping resource. In the absence of this coping resource, chemically dependent people experience withdrawal and may not be able to function in competent manner.

Anxiety is a common emotion in parenthood with caretaking responsibility introducing new experiences for parents to adapt (Pakenham, Smith, & Rattan, 2007). In comparing women with and without children, mothers reported higher levels of stress than their non maternal counterparts (Evenson & Simon, 2005). Ballash, Leyfer, Buckley, and Woodruff-Borden (2006) identified distinct differences in coping styles between anxious and non-anxious mothers. Anxious mothers were more likely to engage in more maladaptive coping styles such as less active coping, expressing negative behavior/thoughts, and exhibiting less adaptive ways to coping with stressful laboratory tasks. The perceptions of their children also differed with anxious mothers. Anxious mothers were more likely to inaccurately predict that their children would engage in maladaptive coping behavior, such as avoidance or escapism (substance abuse).

These findings from this work indicate that a maladaptive coping style could influence a mother to have inappropriate expectations of her children.

Other investigators have found similar results suggesting that coping skills as a parental resource could mediate an identified stressor and reduce behavior problems of their children. Frey (1989) has emphasized the use of coping skills in addition to social support and meeting emotional needs to protect the parenting experience from stress. Social support and an individual belief about their own competence have also been cited for their influence on mediating parent's psychopathology (e.g., depression or substance abuse) on a child's behavior (Hastings & Brown, 2003).

Parenting Behaviors

Expectations of Children. It is common for most parents to have certain behavioral expectations for their children especially if they are developmentally appropriate, e.g., tying their shoelaces by the age of six. These expectations also include expectations based on academic performance. Higher expectations were associated with higher academic performance (Vasta, Haith, & Miller, 1998). However, parents/guardians can become frustrated when these expectations exceed the capabilities of the child (Bavolek, 1989). In a way, the type of expectations held for the child is a gauge for the emotional tolerance of the parent (Harmer, et al, 1995). Parents with inappropriate expectations are prone to child abuse or avoidance tactics, i.e., substance abuse (Bavolek, 1989). For example, adopting a parentified status (child assumes parent role) is considered an inappropriate expectation for children (Godsall et al, 2004). These role swaps are common when chemically dependent primary caregivers are unable to properly take care of the household (Sharpe, 2005).

Some ethnic communities have developed role expectations for their children to promote safety and survival. Specific expectations for African American children are required to maintain their safety or ensure that they are able to compete in an environment where minority status could limit their opportunity. Both safety and survival expectations are responses to a high risk environment (Fowler, Ahmed, Tompsett, Jozefowicz-Simbeni, & Toro, 2008). These types of cultural expectations are common among communities of color (Underwood, 1992.) The cultural expectations that have promoted health of the family can be perverted when the parent succumbs to substance abuse. Chemically dependent mothers may shift adult responsibilities on their children if mothers do not have access to some type of social resource (Sharpe, 2005.)

African American mothers in substance recovery would benefit from assessing the quality of their resources (relationship with parents) and determining if other social supports could be utilized to ensure that their needs are met. African American women in recovery who can learn to meet their own needs could develop psychosocial competence (coping), which may later translate in more appropriate expectations for their children and improved quality of interactions with their children.

Quality of Interactions with Children. A parent's interaction with their child can be enhanced by their repository of caregiver resources. These resources can include relationship with parent, emotional needs met (through relationship with parents or other significant individuals) or the use of coping skills. The use of active coping can help mediate external stress and allow mothers to have positive interaction with their children. Travis and Combs-Orme (2007) found that mothers of newborns who had less positive interaction with children were also more likely to engage in maladaptive coping strategies. Leiferman, Ollendick, Kunkel, and Christie (2005) also found that the mental health of mothers influenced the interaction with their

children. Poor mental health was negatively correlated with positive parenting interaction such as care and monitoring of children. The identification of parenting resources and skills that could aid a mother experiencing mental health challenges, may lead to positive health outcomes for the child.

The recursive effect of poor parenting illustrates why assisting at risk mothers with parenting skills is beneficial to the health of both mother and child. Several studies have shown that parents under duress exhibit poor coping skills, such as substance use or avoidance, which influenced their parenting skills (Harmers et. al, 1999; Lieferman et. al, 2005). The influence of parenting behavior and distress is associated with children responding with their own emotional distress, such as misbehavior or neediness. In Pelham et al. (1999), found that stressed parents were more likely to drink, which was associated with their children's misbehavior. The resulting misbehavior of child was a new stressor and further encouraged the parent to drink (see Figure 1).

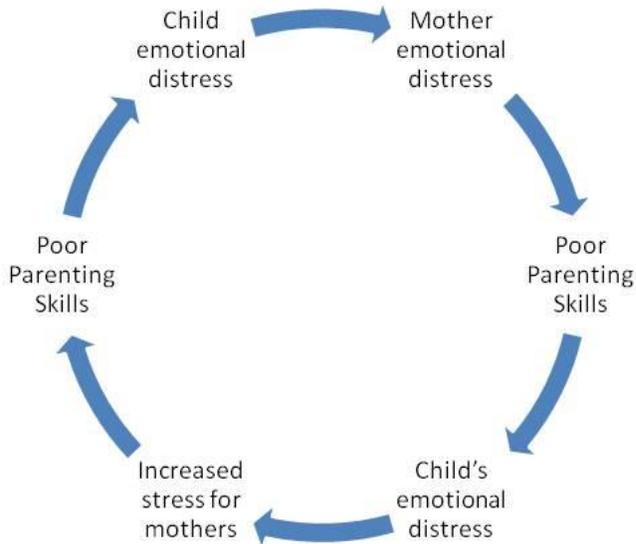


Figure 1. Cyclical relationship between poor parenting and child's antisocial behavior

It is important for African American mothers with a history of chemical dependency to have access to coping skills that would support a positive interaction with their children. The use of coping skills could help mediate the presence or absence of a positive relationship with parent or emotional needs met and support superior quality of interaction with their children. Being an effective parent may also increase their chances of success with maintaining their recovery.

Utilizing scientific investigation to uncover factors that prevent or reduce prevalence of poor parenting is one way to alleviate the problem without persecution of the sufferers. Similar

to many other social challenges, there may be no singular cause to explain parenting behavior. However, the continual extraction and analysis of pertinent variables like familial relationships, emotional needs, and coping, may redefine how we should support those population groups who may be vulnerable to stressors that could impact their parenting behavior.

Statement of the Problem and Hypotheses

Chemically-dependent African American mothers are a vulnerable sub population. This population is more likely to encounter environmental and social challenges (e.g., discrimination and poverty) that compound the problems associated with chemical dependency. Other risk factors that predispose mothers to chemical dependency include being exposed to their own parents' substance abuse, their own childhood abuse or neglect, or a lifetime of blocked access to educational or vocational advancement. Since these aforementioned risk factors cannot be easily manipulated, this study examined predictor variables and a mediator variable that could be modified in real world settings. The researcher purposefully focused on factors that the literature has shown to be related to quality of parenting: Positive relationship with parents, inability to emotional needs met, and maladaptive coping. This study assessed how *positive relationship with parents* and perceptions of *inability to meet emotional needs* are associated with *maladaptive coping*, *inappropriate expectations of children*, and *negative interactions with children* (see Figure 1).

Maladaptive coping skills were expected to mediate the direct influence of lifetime social supports (positive relationship with parents and inability to meet emotional needs) on reported parenting behaviors. A path model was chosen to illustrate the direction of influence from predictor variables (positive relationship with parents and inability to meet emotional needs) to the mediator and to the outcome variables (Baron & Kenny, 1986). In this study, positive

relationship with parent and inability to meet emotional needs are the predictor variables. Since previous research indicates that these variables are related, double-sided curved arrows are used to symbolize that these two predictor variables are correlated to each other (Loehlin, 2004). From both positive relationship with parent and inability to meet emotional needs, a one-sided arrow with the head directed toward the mediator is used to show the hypothetical causal¹ direction of predictor to mediator. Similarly, the mediator (maladaptive coping) is hypothesized to have an association with inappropriate expectations of children and negative interactions with children as seen with two one-way arrows extending from the mediator to the outcome variables. One-way arrows from positive relationship with parents and inability to meet emotional needs to outcome variables, inappropriate expectations of children and negative interactions with children, are included to propose direction of influence on these initial predictor variables on the outcome variables.

Hypotheses

This study will employ a non-experimental within group design to test the following hypotheses:

1. Positive relationship with parents and inability to meet emotional needs is significantly associated with inappropriate expectations of children and negative interactions with children.
2. Positive relationship with parents and inability to meet emotional needs is positively associated with maladaptive coping skills.

¹ Loehlin (2004) recommends a broader interpretation of causal relationship where change in the predictor leads to change in mediator, and changes in the mediator leading to change in the outcome variable.

3. Maladaptive coping skills are positively associated with inappropriate expectations of children and negative interactions with children, when controlling for the mother's positive relationship with her parents and with her inability to meet emotional needs.
4. The indirect influence of maladaptive coping skills on the association of positive relationship with parents and inability to meet emotional needs with inappropriate expectations of children and negative interactions with children is significantly different from zero.

CHAPTER 3.
METHODOLOGY
Research Methods

Overall Strategy and Rationale

A cross-sectional survey research design was used to examine parental related behaviors among women with a history of substance dependence. This quantitative research design has been noted as effective for group administration (Trocchim and Donnelly, 2007). The benefit of using this design is related to its ability to answer questions about the research or instrument in person (Trocchim & Donnelly). Face- to- face interaction with the researcher can assist in identifying participants who are visibly frustrated or may have low literacy (Trocchim & Donnelly). These research designs are less costly than other types of research methods (Trocchim & Donnelly).

Design

The design of the present study used a non-experimental comparative approach. This design strategy is appropriate for studies where the independent variable cannot be manipulated (Mertzler, 2008) as is required in experimental studies in order to ascertain effects on dependent variable. This design was chosen for this study since relationship with parents, emotional needs met, and coping cannot be manipulated as independent variables. Group differences were explored among African American mothers with a history of chemical dependence. Select demographic information and the study's predictor variables (positive relationship with parents, inability to meet emotional needs, and maladaptive coping) were used to assess group differences.

Research Sample

A convenience sampling was drawn from a population of women. The population included some women that were in treatment to be in compliance with the Georgia Department of Family Child Services. Many of the respondents were reluctant to participate. This reluctance may have been related to legal issues regarding child custody. This convenience sampling approach was intended to increase participation rates. Legal issues and the stigma of former drug use are compelling reasons to decline participation. Additionally no incentives were offered. This decision may have limited participation; but could have assisted with reducing coercion. Random assignment would have allowed for more generalizability to the greater population and eliminate sampling bias. However the difficulties in recruiting this population influenced the choice to use a convenience sample.

Participants. The sample consisted of 38 African American mothers in recovery in the Atlanta metropolitan area in Georgia. The mean age of the sample was 36. Participants were recruited from two substance abuse treatment centers in Georgia. All participants were English speaking and over the age of 18. A minimum of 10 cases per predictor are needed when large effects are anticipated (Field, 2005). Large effects were anticipated based on the literature description of the influence of the predictor variables on the outcome variables (Jones & Ford, 2008). Therefore, a sample size of 38 was considered satisfactory for this study.

Procedure

Procedure. A description of study's purpose was read to the potential participants. Afterwards, mothers over the age of 18 were invited to participate in the study. Although women of other races participated, data from the African American mothers were only used for this study. Willing individuals were read an informed consent and asked to sign the consent

form as an indicator of their agreement to participate. Each participant received a copy of their signed informed consent. Next, the participants were given a copy of the Michigan Screening Profile of Parents (Helfer, Hoffmeister, & Schneider, 1978). These forms were completed using a paper-pencil survey method.

Instrument

Survey Instrument: Michigan Screening Profile of Parents. The Michigan Screening Profile of Parents (MSPP) is a screening instrument designed to detect parent-child interaction problems, special characteristics of any child, any crisis that mother or family is experiencing, and the support system that is available to the parent. The test was developed by Helfer, Schneider, and Hoffmeister in 1977 for parents and prospective parents.

The MSPP is composed of four sections, A-D (see Appendix). The first section (Section A) contains 17 demographic items (sex, race, marital status), historical data (types of punishments received as a child, type of household), and current living patterns (trends in employment, housing, and romantic relationships). Demographic data from Section A were only used in the preliminary statistics to assess the type of group differences among this population of African American women with a history of chemical dependency. Section B has 30 items and explores relationship with parents, emotional needs met, expectations of children, and coping skills. Section C has 18 items and collects behavioral health information on the children and the parent's responsiveness to their children. Section D has nine items and collects data on the expected quality of interaction between the parent and child. Section D was not included in this study because this section was designed for participants without children.

Section B includes four subscales: Relationship with Parents, Emotional Needs Met, Expectations of Children, and Coping Skills. Section C includes the fifth subscale: Interaction

with Children. Relationship with Parents subscale measures the quality of lifetime and present relationship with parents. Emotional Needs Met subscale assesses the degree the individual's psychological needs were met through earlier developmental stages and current perception of those needs being met. Coping Skills subscale measures the levels of psychological competence available to adjust to challenges in life. The Expectations of Children subscale assesses the quality of expectations that parent has toward their own children. Interaction with Children subscale examines how parent respond to their children's disobedience and misbehavior.

The MSPP's authors used a sample of 2,174 participants to test for reliability for the original test (Helfer, Schneider, & Hoffmeister, 1977). Moderate correlations were found across the four scales by the study original authors. Emotional Needs Met was positively correlated with Relationship with Parents (.40) and Coping Skills (.43). Coping Skills was minimally correlated with Relationship with Parents (.15). High validity was found in Section B based on its ability to differentiate between parents with apparent problematic relationship with their children and those without problems with their children. Moderate reliability was found in the three original subscales: Relationship with Parents (69%), Coping Skills (65%) and Expectations of Children (62%).

The reliability of the items in Section C was not reported by the authors of the MSPP so the internal consistency on the selected items was assessed in this study. The researcher chose the Cronbach alpha reliability test in the software Statistical Package for Social Science (SPSS) for preliminary analysis of reliability. A description of the item selection process is found below.

Selection of Items from the Subscales

Reliability of Subscales

This study used four recognized subscales and one newly created (in this study) subscale from The Michigan Screening Profile of Parents (MSPP). The four identified subscales were composed of items found in Section B. These subscales included Relationship with Parents, Emotional Needs Met, Expectations of Children, and Coping Skills. The reliability of most of these subscales was tested by the scale's authors and is reported in previous text. The fifth subscale identified by this research study was created using 6 items from Section C of the MSPP that collected data on the respondent interaction with their offspring. Additionally, preliminary analysis of this study's data indicated that some of the subscales were not reliable for this study's population based on low correlations for intraconstructs. A SPSS reliability analysis was performed on the new fifth subscale and each of the original four scales to detect which items would improve the scale applicability if eliminated or substituted for this study's population. Items responsible for contributing to low alphas levels (less than .6) were identified. An exploratory factor analysis was later performed to determine if the low alpha generating items were also contributing to a low factor loading for each subscale. Items that had both low factor loadings and a low alpha for reliability analysis were eliminated. Subscales with less than two items were eliminated since single indicator constructs are less stable than constructs measured by two items are more (Kline, 2005). Although three –to-one is the recommended indicator to latent construct ratio however, analysis can still be performed with two item constructs (Kline, 2005).

The original subscales were modified to increase reliability for this study's population (see Table 1). The differences in reliability from the original authors' population and this population suggested that the unique experiences of this sample may have influenced how the constructs were defined. Emotional Needs Met subscale was reduced from 7 items to 3 items.

The Cronbach alpha for Emotional Needs Met was .60 with factor loadings ranging from .491 to .679. The items chosen for Emotional Needs Met assess the likelihood that an individual did not address their emotional needs. These items were recoded so high scores on this subscale would indicate a respondent's inability to meet their emotional needs. Thus, reference to this measured trait has been referred to as inability to meet their emotional needs in the text. Relationship with Parents subscale was reduced from 9 items to 4 items with alpha of .69. The items chosen for Relationship with Parents assess whether or not an individual has a positive relationship with their parents. Thus, reference to this measured trait has been referred to positive relationship with parent. Coping Skills subscale was reduced from 3 items to 2 items. The new Coping Skills subscale resulted in a reliability alpha of .69. These items were recoded so high scores on this subscale would indicate a desire to use a maladaptive coping response. Thus, reference to this measured trait has been referred to maladaptive coping skills. Expectations of Children subscale was reduced from 6 items to 2 items with an alpha of .69. These items were recoded so high scores on this subscale would indicate a mother may have inappropriate expectations for their children. Thus, reference to this measured trait has been referred to as inappropriate expectations of children in the text. All of the items from the fifth subscale, Interactions with Children, were identified in this study based on 8 items found in Section C of the MSPP that described quality of interaction with their offspring. These eight items were not tested for reliability by the MSPP's authors and centered on severe punishment. Findings from our reliability analysis indicated two of the eight items, "my child makes me so angry, I get afraid I may lose control and really hurt him (her)" and "nothing I do seems to satisfy my child," were not assessing the same factor as the other six items. Therefore, these two items were removed. These items were recoded so high scores on this subscale would indicate a mother's potential for a negative interaction with her

child. Thus, reference to this measured trait has been referred to as negative interaction with children.

Table 1.
List of Study's Subscale Items

Subscale Name	Wording of Item	A
Positive Relationship with Parents	1. The main thing that I remember from my childhood is the love and warm feelings my parents showed me	.69
	2. My mother and I have always gotten along well	
	3. I have always been very close to my father	
	4. I have always been very close to my mother	
Inability to Meet Emotional Needs	1. No one has ever really listened to me	.60
	2. I have never felt really loved	
	3. As a child, I often felt that no one paid much attention to what I wanted and needed	
Maladaptive Coping Skills	1. Sometimes I just feel like running away	.69
	2. When my baby cries, I often get the feeling I just can't stand it	
Negative Interactions with Children	1. When my child misbehaves, I may simply ignore him (her)	.73
	2. I may ignore my child's disobedience for awhile; then I am apt to lose my temper and say something that I may later regret	
	3. I may severely punish my child if he (she) continues to disobey me	
	4. My child has to push me pretty far before I will really punish him/her	
	5. I may tolerate my child's misbehavior up to a point; then I am likely to punish him (her) more severely than I intended	
	6. My child gets me to the point that I feel that I have no other alternative than to severely punish him (her)	
Inappropriate Expectations of Children	1. Children need to know exactly what is expected of them, even though they are very young.	.69
	2. It is extremely important for me to have my children behave well even when they are babies.	

CHAPTER 4.

RESULTS

The present study assessed how maladaptive coping skills mediate four associations between independent and dependent variables. Independent variables include positive relationship with parents and inability to meet emotional needs. Dependent variables include mothers' expectations of children and their quality of their interactions with children. A list of these four associations is found below:

1. Mothers' positive relationship with their own parents is positively associated with mothers' low scores on inappropriate expectations of their children
2. Mothers' positive relationship with her own parents is positively associated with mothers' low scores on negative interactions with their children
3. Mothers' inability to meet emotional needs is positively associated with mothers' inappropriate expectations of their children
4. Mothers' inability to meet emotional needs is positively associated with mothers' negative interaction with their children

The analyses results are organized as follows: Univariate analyses, bivariate analyses, and multivariate analyses. Univariate analyses include frequencies, percentages, means, and standard deviations of the variables in this study. Bivariate analyses consist of bivariate correlations. The multivariate analysis conducted was a statistical mediation equation. Data analyses were performed using the Statistical Package for Social Sciences (SPSS), version 16.

Path coefficients were used as indices of the strength of relationships between the study's five main variables. Causation or direction of causality cannot be determined in a non-experimental design. However, the potential for a causal relationship was explored between perceived indicators of social supports (positive relationship with parents and inability to meet emotional needs), maladaptive coping skills, and parenting behaviors with children (see Figure 1).

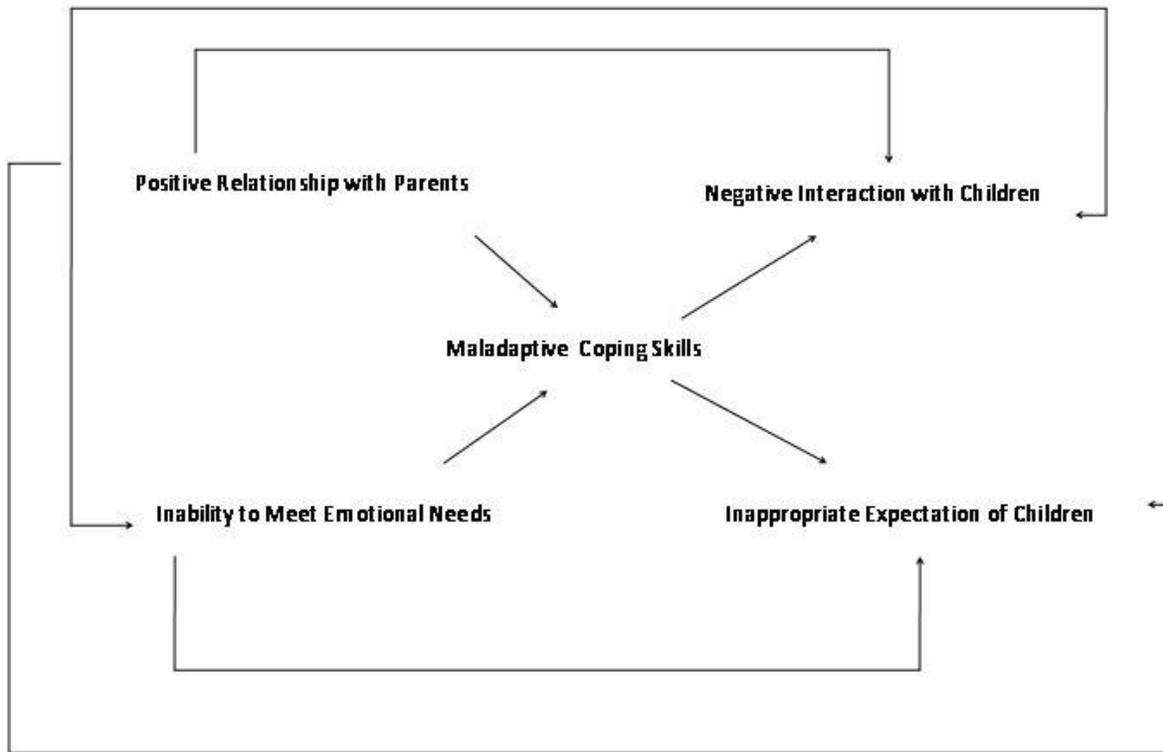
Theoretical assumptions were tested using linear regression analysis. Composite scores of subscales were generated for hypothesis testing. A score was created by calculating the averages for the items of each subscale, a practice often used for attitude scales (Revelle, 2009). This procedure was preferred over mean and sum scores since this formula prevents SPSS from automatically omitting all of the data for a subscale through pairwise deletion function.

Correlations of average composite scores can be found in Table 2.

Table 2.

Descriptive Statistics of Average Scores of Variables

Composite Variable	M	SD	Range
Positive relationship with parents	18.13	8.18	24.00
Inability to meet emotional needs	13.42	4.65	18.00
Maladaptive coping skills	7.34	3.65	14.00
Inappropriate expectations of children	4.95	3.39	14.00
Negative interactions with children	19.79	9.18	32.00



The far left arrow is beginning at Positive Relationship with Parents and ending at Inappropriate Expectations of Children.

Figure 2. Proposed mediation model on social supports influence on parenting behavior among African Americans mothers with a history of substance dependence

Univariate Analysis

Preliminary analyses were performed to assess outliers, missing data, and group differences as a function of inappropriate expectations of children and negative interactions with children. Table 2 includes the univariate data collected in Section A of the MSPP. Frequencies, percentages, and standard deviations were generated to detect normality, linearity, homogeneity and other parametric assumptions for later hypothesis testing. This section reports on childhood experience, current demographics, and relationships with spouse, employers, and social service agencies.

Childhood experiences. Childhood experiences were diverse. Eighteen percent of participants indicated that they were separated from their mother before the age of 12. Sixty percent of the women described the homes that they were reared as single parent households. Forty seven percent of participants indicated they received physical punishment in childhood.

Current status. The current status was less diverse with distinct similarities across the participant population. Sixty three percent of women reported having a high school diploma (n=15) or higher (n=9). Sixty eight percent of women documented that they had two or more children. Seventy one percent of women reported that they have never been married. Fifty eight percent of the women responded they were earning under \$6,000 dollars a year.

Past year experiences. The MSPP also included questions on the frequency of life events in the past year such as moving or losing a job. This “fill in the blank” response was designed to describe the number of changes that occurred in significant relationships (spouse, job, social service agencies) These questions had the largest amount of missing data. The missing data for this series of questions may be related to response format of the questions. These questions required a zero to indicate that a particular scenario did not occur (e.g. quit job).

Thus, several respondents may have opted to skip over items that did not apply to their experience. Nineteen percent of the women reported that they quit at least two jobs in last 12 months. Sixteen percent of the women indicated that they contacted a social service agency in the past year. Twenty six percent of the women reported moving in the past year. Arguing with mate fairly often or more was a response chosen by 34% of the participants. Eighteen percent of the mothers indicated that they separated from their mates in the past year. Eighteen percent also indicated that they made up with their mates in the past year.

Missing Data. Listwise deletion was used for the removal of one case who did not answer any of the items on one of the subscales, Interactions with Children (McKnight, McKnight, Figueredo, and Sidani, 2007). Other cases with missing data were retained since data were available to produce average scores for the two dependent variables.

Outliers. Outliers were detected by transforming values of composite variables into Z-scores. Z-scores were generated for each of the five composite variables using means and standard deviations. Z score values were not greater than + 3 or -3 deviations from the mean; therefore, no adjustments were required for these data (Field, 2005).

Bivariate Analyses

Since the study was designed to learn more about a high risk group, it was important to assess whether or not certain demographic data were correlated with items that measure the two independent variables (positive relationship with parents and inability to meet emotional needs). Significant correlations between demographic data and predictor variables may have suggested the potential of residual effects to be found later in the path analyses. Marital status and education were selected as the model's covariates since both variables were documented as

having associations with the inappropriate expectations of children and negative interactions with children (Duncan, Brooks-Gunn & Klebanov 1994; Laursen, 2005; Yu & Gamble, 2008).

Bivariate analysis: Pearson's correlation. Pearson's correlation equations were calculated using composite score values for all the dependent and independent variables (Table 3). These analyses were performed to assess the effect of the independent variables on the dependent variables as well as the covariate variables (American Psychological Association Style Manual, 2001). A significant negative correlation was found between inappropriate expectations of children and education ($r = -.35$, $p = .03$). The detection of this significant correlation suggests that mothers' education may be influencing quality of inappropriate expectations of children in addition to our independent variables. A significant positive relationship ($r = .31$, $p = .05$) was found between inability to meet emotional needs and maladaptive coping skills composite variables, which may indicate that mothers who do not have their emotional needs met are more likely to use maladaptive coping skills, a relationship consistent with the mediation model. The maladaptive coping skills composite score had a significant association with negative interactions with children ($r = .40$, $p = .01$). This finding supports the basic premise of the mediation model that the use of maladaptive coping skills is associated with negative quality of interactions with children. A negative association between positive relationship with parents and inability to meet emotional needs approached significance ($r = -.30$, $p = .07$) and may suggest women who have their emotional needs met may lack positive relationship with their parents. This result is worth noting since our model indicated with bidirectional arrows that these two variables would be positively correlated.

Table 3.
Zero Order Correlation Matrix of Composite Scores and Covariates

	1	2	3	4	5	6	7
1. Education	1	-	-	-	-	-	-
2. Inability to Meet	.24	1	-	-	-	-	-
3. Inappropriate Expect.	-.35*	.04	1	-	-	-	-
4. Maladaptive Coping	-.04	.31*	-.23	1	-	-	-
5. Marital Status	-.28	.02	-.05	-.03	1	-	-
6. Negative Interact	.22	.24	.09	.40*	.17	1	-
7. Positive Relationship	.13	-.30	-.12	-.06	-.09	.12	1

Significant relationships are marked by an asterisk ($p=0.05$)

Multivariate Analyses

The mediation model assumes the mediator has significant influence on the direct effect of independent variables on the dependent variable. The level of influence of the mediator is determined by detecting a significant indirect effect. This study used the mediation approach described by Preacher and Hayes (2004), which centers on the detection of an indirect effect significantly different from zero. Preacher and Hayes (2004) assert that a significant indirect effect is the primary indicator for detection of mediation. A statistical mediation equation was calculated using bootstrapping procedures developed by Preacher and Hayes (2008). This procedure assists with detecting mediation within datasets that may be underpowered due to sample size (Preacher & Hayes, 2004.) This type of statistical mediation analysis is suitable for this study's sample (Preacher & Hayes, 2008) since the mediation model only has one mediator.

One thousand bootstrapping samples were generated for these analyses. We were able to compare outcomes from the original dataset and bootstrapped dataset (Preacher & Hayes, 2004). The bootstrapping option obtains elements from the original data and re-samples to create a larger data set for analyses only with upper and lower confidence intervals. These upper and lower confidence intervals for bootstrapping provide an indication of a significant indirect effect similar to the Sobel test (Preacher & Hayes, 2004) without the requirements of a normal distribution that may not be met in tests of indirect effects, particularly with small samples.

Another feature of this macro is the assessment of influence of covariates. The macro can perform an analysis for each path while controlling for the influence of covariates. The analyses are based upon rejecting the null hypothesis. The null hypothesis predicts that the indirect effect from the mediator is not significantly different from zero (Preacher & Hayes, 2004). Probability levels less than .05 indicate significance for the normal theory results. The absence of zero between lower and upper limit indicates significance for the non parametric results (Preacher & Hayes, 2004). A final path model with unstandardized coefficients from the mediation analyses can be found is illustrated in Figure 3.

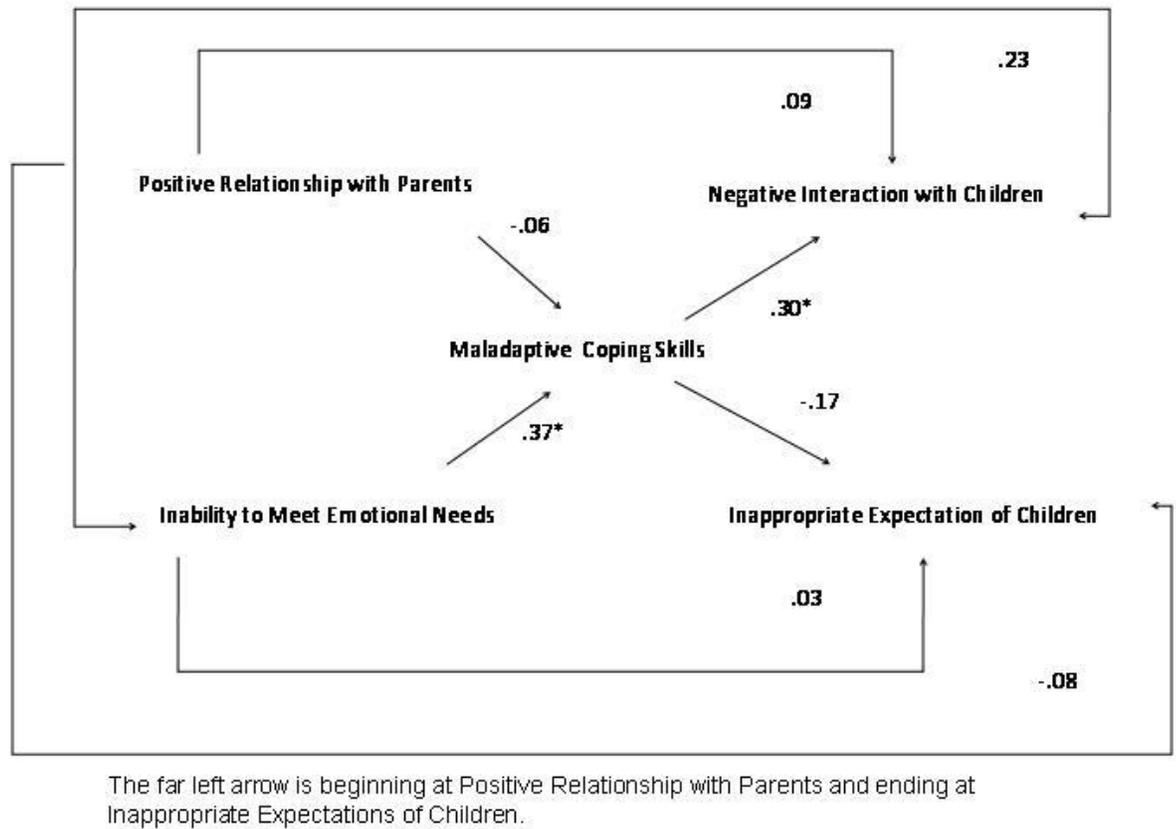


Figure 3. Final mediation model on social supports influence on parenting behaviors among African Americans mothers with a history of substance dependence

Hypothesis 1: *Positive relationship with parents and inability to meet emotional needs is significantly associated with inappropriate expectations of children and negative interactions with children.*

Analyses results did not support the prediction of significant associations between the four described paths from independent to dependent variables. The four paths (Positive Relationship with Parents to Negative Interactions with Children, Positive Relationship with Parents to Inappropriate Expectations of Children, Inability to Meet Emotional Needs Met to

Negative Interactions with Children, and Inability to Meet Emotional Needs to Inappropriate Expectations of Children) failed to reach significance. As expected, findings using the original data set and bootstrapping (1000 samples) were similar.

Hypothesis 2: Positive relationship with parents and inability to meet emotional needs is positively associated with maladaptive coping skills.

There was a significant positive relationship found between Inability to Meet Emotional Needs and Maladaptive Coping Skills ($b = .37$, $SE = .19$, $p = .05$), which suggests that mothers who do not have their emotional needs met are likely to use maladaptive coping skills. The association of quality of mother's relationship with parents and coping skills was not significant.

Hypothesis 3: Maladaptive coping skills are positively associated with inappropriate expectations of children and negative interactions with children, when controlling for the mother's positive relationship with her parents and with her inability to meet emotional needs.

This hypothesis was partially supported. Maladaptive Coping Skills was significantly positively associated with Negative Interactions with Children ($b = .29$, $SE = 0.13$, $p = .03$) when controlling for independent variables. This finding suggests that mothers who use maladaptive coping skills are more likely to have negative interactions with their children. The relationship between Maladaptive Coping Skills and Inappropriate Expectations of Children was not significant in this mediation model when controlling for independent variables.

Hypothesis 4: *The indirect influence of Maladaptive Coping Skills on the four different associations between the social support independent variables, and the parenting behavior dependent variables, is significantly differ from zero.*

The analysis did not find evidence for the associations below, so these hypotheses were not supported:

1. Maladaptive coping skills mediates the association between mothers' relationship with their own parents and mothers' expectations of their children
2. Maladaptive coping skills mediates the association between mothers' relationship with her own parents and mothers' interaction with their children
3. Maladaptive coping skills mediates the association between mothers' emotional needs met and mothers' expectations of their children
4. Maladaptive coping skills mediates the association between mothers' emotional needs met and mothers' interaction with their children

The indirect effect of Maladaptive Coping Skills on the association between Inability to Meet Emotional Needs and Negative Interactions with Children was .11 (CL: 0.00 to .32, $p=.13$). The indirect effect of Maladaptive Coping Skills on the association between Inability to Meet Emotional Needs and Inappropriate Expectations of Children was -.07 (CL: -.37 to 0.00, $p=.21$). The indirect effect of Maladaptive Coping Skills on the association between Positive Relationships with Parents and Inappropriate Expectations of Children was 0.01 (CL: -.04 to .12, $p=.72$). The indirect effect of Maladaptive Coping Skills on the association between Positive Relationship with Parents and Negative Interactions with Children was -.02 (CL: -.15 to

.08, $p=.71$). Similar indirect effects found for each tested association using the bootstrapping re-sample analysis.

Exploratory Analyses

Marital status did not significantly influence either of the dependent variables: Negative Interactions with Children or Inappropriate Expectations of Children. The Indirect Effect Mediation model (Preacher & Hayes, 2008) did indicate that education ($b=-.3764$, $SE=0.17$, $p=.04$) did have significant influence on Inappropriate Expectations of Children. This finding indicates that mothers with higher levels of education are less likely to have inappropriate expectations of children.

CHAPTER 5.

DISCUSSION

General Summary

African American mothers are at higher risk for adverse health outcomes (Office of Minority Health, 2008) as a result of their greater exposure to harmful environmental factors (Dunlap, 1992; Sharpe, 2005). Substance dependency further increases risk of African American mothers for adverse health. Their role as primary caregivers creates an increased urgency to discover ways to reinforce their strengths since their children are also at higher risk for developing substance abuse disorders later in life (Bavolek, 1989; Dunlap, 1992; Emshoff & Price, 1999). This study used a mediation model to determine associations between social support of African American mothers and the influence of social supports towards mothers' use of positive coping strategies and suitable parenting behaviors. Lifetime social supports, positive relationship with parents and inability to meet emotional needs, were expected to have significant associations with maladaptive coping skills, and parenting behaviors, negative interactions with children and inappropriate expectations of children. Maladaptive coping skills was predicted to have a significant relationship with negative interactions with children and inappropriate expectations of children. Lastly, maladaptive coping skills was expected to significantly mediate the strength of association between social support variables and parenting behaviors.

A non-experimental comparative design was used to explore the distinct patterns of influence among African American mothers with a history of chemical dependency. Indirect mediation analyses involved the use of multifaceted statistical techniques where in one application can control for the influence of a covariate (marital status and education), test for

significant effects between independent and dependent variables, and correct for bias related to non parametric assumptions using bootstrapping re-sampling. The study's findings were mixed with evidence indicating one type of social support, Inability to Meet Emotional Needs, was positively associated with Maladaptive Coping Skills. Maladaptive Copings Skills was also positively associated with one parenting behavior, Negative Interactions with Children.

Although all of the hypotheses were not supported, the partial support of some of the study's predictions suggests that additional investigations are warranted for these study's variables.

Quality of Associations between Social Supports and Parenting Behaviors

It was predicted that significant positive associations would be found between social supports and parenting behavior variables, Negative Interactions with Children and Inappropriate Expectations of Children. Significant relationships were not found between Positive Relationships with Parents and Inability to Meet Emotional Needs with Inappropriate Expectations of Children and Negative Interactions with Children in the original or in the bootstrapped re-sample.

The findings for the first hypothesis were not consistent with the review of the literature. These paths were expected to be positive and significant since the literature has sufficient evidence on the positive influence of social supports on parenting in general (Balaji et. al, 2007; Dunlap, 1992; Harmers et. al, 1999; Jayakody et. al, 1993; Marshall et. al, 2001). Divergence from the literature may be explained by differences in population characteristics between this study and the populations referenced in the literature. Most of the recent literature that examined social supports' influence on parenting behavior either did not disclose if the African American mothers had a history of substance dependency or did not explore similar types of parenting behaviors. This study also investigated specific types of parenting behaviors, Interactions with

Children and Inappropriate Expectations of Children, which has not been extensively studied in relation to social supports' influence.

Quality of Association between Lifetime Social Supports and Maladaptive Coping Skills

The direct influence of lifetime social supports on Maladaptive Coping Skills was assessed in the second hypothesis. It was predicted that mothers' negative perception of the quality of relationship with parents and their inability to meet their emotional needs would be significantly associated with use of Maladaptive Coping Skills. Inability to Meet Emotional Needs was the only social support variable significantly associated with Maladaptive Coping Skills; therefore this hypothesis was only partially supported. The report of a positive relationship with parents may only indicate that a mother has affection towards parent(s) but not indicate provision of social support from parent to adult offspring.

Inability to Meet Emotional Needs significant association with Maladaptive Coping Skills is consistent with the literature, which has indicated that satisfying emotional needs can later be internalized as a coping resource (Lazarus and Folkman, 1984; Travis & Combs-Orme, 2007). Inability to Meet Emotional Needs appears to be a more transparent indicator of social support since all of the indicators for these items explicitly state the type of measured social supports. Mothers who are able to get their needs met from a parent or another significant individual in their life may be more likely to choose better coping responses (Travis & Combs-Orme, 2007). Encouraging an African American mother to address her emotional needs may appear straightforward but could be in conflict with the challenges of overcoming gender and cultural barriers that seemingly demand this sacrifice (Greene, 1999). Addressing emotional needs may be delayed if a mother has to address more urgent physical needs such as food or shelter, which is often the case for mothers in recovery since jobs and relationships may need to

be abandoned in order to receive treatment (NIDA, 2007). Another challenge for the African American mother in recovery is that substance abuse is frequently related to a perceived inability to meet one's emotional needs or to appropriately respond to stressors (Carver, 1989). Thus, a woman with a history of chemical dependency may experience difficulty with both coping and having their emotional needs met (Battaglia, 2008; Jones & Ford, 2008). Maladaptive coping and meeting emotional needs are also related to poor parenting behaviors (Ballash, et. al, 2006; Hastings & Brown, 2003). Treatment programs that address strengthening a mother's ability to meet her emotional needs and reinforce the use of positive coping strategies could simultaneously reduce relapse rates and frequency of negative parenting behaviors.

Maladaptive Coping Skills Association with Parenting Behaviors

It was predicted that high scores on Maladaptive Coping Skills would be significantly associated with high scores of Inappropriate Expectations of Children and Negative Interactions with Children, when controlling for Positive Relationship with Parents and having the Inability to Meet Emotional Needs. This hypothesis was supported for one of the two parenting variables, Negative Interactions with Children. This finding suggests that mothers with maladaptive coping skills are more likely to have negative interactions with their children. This result is consistent with literature findings which indicate that parents that exhibit negative coping behaviors are more likely to experience poor quality of interaction with their children (Harmer et. al, 1999; Leiferman et. al, 2005; Pelham, et. al. 1999; Perris & Anderson, 2000; Travis & Combs-Orme, 2007). More problematic for our study population is that negative interactions with children can produce a recursive effect which could influence mothers in recovery to engage in maladaptive coping behaviors such as avoidance or substance abuse (Pelham, 1999). This maladaptive coping behavior creates more problems in future interactions

with her children, which may lead mothers in recovery to again consider harmful coping strategies (Pelham, 1999).

Maladaptive Coping's Indirect Effect

A significant indirect effect was predicted for all four mediated paths. This hypothesis was not supported for any of the four paths. It was most surprising that a significant indirect effect was not found for the path "Inability to Meet Emotional Needs—Maladaptive Coping Skills—Negative Interaction with Children." This particular path was the most promising one since it had significant paths from initial to mediator and from mediator to outcome. Previous studies have also found that social support can assist in development of personalities that would choose positive coping strategies (Ballash, et. al, 2006; Block & Block, 1980; Lazarus & Folkman, 1984; Travis & Comb-Orme, 2007). Additionally, this unexpected finding appears to explain why Preacher and Hayes (2004) cautioned researchers to focus more on the indirect effect of the mediator (Maladaptive Coping Skills) rather than significant paths.

Exploratory Analyses

Education had a significant inverse association with Inappropriate Expectations of Children. No significant effects found for Marital Status. This finding is consistent with literature findings that found maternal education associated with more nurturing child rearing practices (Duncan, Brooks-Gunn & Klebanov 1994; Yu & Gamble, 2008). Maternal education was also a predictor of knowledge of developmental expectations of children (Ertem et. al, 2007).

Strengths

The primary strength of this study is its focus on cultural parenting resources for populations experiencing recovery from substance dependency. The variables of interest were chosen because they are applicable to the disease of substance dependency and its damaging effects on parenting behaviors. Recovery is characterized as a difficult process because this process requires exploring painful issues that have reinforced substance dependency or are the result of this disorder (Battaglia, 2008; National Institute of Drug Abuse, 2007). Parenting introduces additional stressors to the mother in recovery especially if she is not able to effectively manage the behavior of her child. Poor parenting can create its own stress (Harmer et. al, 1999; Leiferman et. al, 2005; Pelham, et. al. 1999; Perris & Anderson, 2000; Travis & Combs-Orme, 2007) and even encourage the recursive cycle of use of alcohol, tobacco, and other drugs to result in negative interactions with her child as seen in Figure 1 (Pelham et. al, 1999). The enlistment of parenting resources that are culturally appealing and appropriate could aid both parent and child while the mother advances in her recovery process. The employment of a family strengthening program is one strategy used by substance abuse prevention researchers to improve parenting skills and prevent children from engaging in substance abuse in adulthood (Emshoff & Price, 1999; Matthew, R., Wang, M., Bellamy, N., & Copeland, E. (2005).

Another strength of this study is its use of the Indirection Mediation Analyses (Preacher & Hayes, 2004) and the bootstrapping re-sampling technique. Both statistical tools allow researchers to overcome limitations previously associated with failure to meet parametric assumptions. The Indirect Mediation Analysis allows for the consideration of mediation models that do meet the significant pathway criteria established by Baron and Kenny (1986). Bootstrapping also enables the researcher to more accurately interpret the meaning of findings by

including 95% confidence intervals and correcting bias in the original sample (Preacher & Hayes, 2004). There were also few differences between normal study results and bootstrapping results which provides support for the utility of these data.

Limitations of the study

This population was chosen due to the unique circumstances that influence their greater risk for dependency so certain limitations were expected. Four major limitations were identified in this study. These limitations include the use of cross sectional data, potential lack of full disclosure, long term effects of substance dependency, and the generalizability of the findings.

Cross sectional data can limit a researcher's ability to interpret certain findings. Cross sectional data also do not provide information on maturation effects (Davis, 1994). Parenting behaviors may change depending on what stage of recovery a mother has reached and cross sectional data would not reveal these other explanatory variables (Davis, 1994). Longitudinal data collection could have assisted in overcoming this limitation.

Participants may have experienced reluctance in fully disclosing on all of the MSPP items. Data were not collected on the level of trust towards the researcher or their experience completing a survey at these treatment centers. Therefore, it was difficult to determine if the mothers felt comfortable providing data on sensitive topics. Many mothers were mandated to attend treatment due to child custody issues. For this reason, some mothers may have been fearful about fully disclosing on inappropriate parenting behaviors.

The MSPP was not designed for women with a history of chemical dependency (Helfer, R. E., Hoffmeister, J. K., & Schneider, C. J.; 1978). Over time, substance dependency introduces other variables, such as poor memory recall (American Psychiatric Association, 2000) that could influence how a participant responds. The length of time and the recency of use of alcohol,

tobacco, and other drug could have influenced respondent answer choices. Since the women were not compared on the number of years of substance abuse, it was not possible to determine if there was a pattern in responses associated with the length of drug dependency period. The inclusion of qualitative interviews could have provided more context on variables not captured by this measure. Data were not available on how the women perceived their treatment experience and whether or not they were compliant to the treatment requirements. Interview data could have collected detailed information on the influence of the treatment experience on social supports, coping, and parenting behaviors. Substance dependency for women is associated with abuse pre and post onset of use (Body, 2004; Sharpe, 2005). Therefore, a mother with a battered sense of self would answer differently from a mother who does not have a history of physical or emotional abuse. A qualitative data collection could contribute to an improved understanding of how factors related to substance dependency affect the variables discussed in this study.

The majority of the items for four of the subscales (Inability to Meet Emotional Needs, Maladaptive Coping Skills, Negative Interactions with Children, and Inappropriate Expectations of Children) were phrased to indicate the presence of a negative trait. Lower scores on negative traits does not imply higher scores on positive traits. It is possible for mothers to demonstrate both positive and negative coping skills as well as both positive and negative traits on parenting behaviors or even maintaining lifetime social supports. This potential for existence of both negative and positive behaviors limits the use of these findings to the variables discussed in this study's model.

Implications

Maladaptive Coping Skills was significantly related to Negative Interactions with Children among mothers in recovery. This finding implies that mothers seeking recovery from substance dependency may benefit from a treatment program that encourages mothers to avoid the use of maladaptive coping skills. Mothers who receive coping skills training could also avoid a recursive cycle of ineffective parenting and substance abuse (Pelham et. al, 1999).

Mothers who reported an inability to meet emotional needs were significantly more likely to report using maladaptive coping skills. Therefore, encouraging mothers in recovery to address their emotional needs in treatment may reduce their use of maladaptive coping skills such as avoidance and substance use. Because maladaptive coping skills have been shown to be harmful to parenting (Mckelvey, Fitzgerald, Schiffman, & Von Eye, 2002) and substance abuse (Battaglia, 2007), treatment and relapse prevention strategies should focus on those issues which influence coping, such as meeting emotional needs.

Higher levels of maternal education have been associated with improved cognitive outcomes (Levine et al, 1991), lower rates of abuse (Bavolek, 2001), and developmentally appropriate expectations (Ertem et al, 2007). Education was found to be significantly inversely associated with inappropriate expectations of children in this study. Mothers with higher education were more likely to report age appropriate expectations of their children in this study. This finding could reflect that the more educated mothers may have had greater access to information on appropriate expectations of children. Parents with inappropriate expectations of their children are characterized as lacking information on developmentally appropriate expectations for their children (Bavolek, 2001; Ertem et al, 2007). Higher levels of numeracy and literacy could explain how a mother's education could contribute to her parenting behavior

(Khandke, Pollitt, & Gorman, 1997) since these skills assist with processing data. Some mothers in our study attended college or graduate school; institutions that require courses that discuss age appropriate expectations of children. Greater exposure to education courses that discuss developmentally appropriate expectations may explain education's influence on expectations of children. There is a dearth of data on how maternal education influences developmentally appropriate expectations of their children. However, the inclusion of parenting programs that promote developmentally age appropriate expectations could enhance any mother's parenting experience.

Future Research

Additional research on how to best to utilize resources and strategies for African American mothers in recovery is needed. African American mothers may decline substance abuse treatment but these same mothers may be open to community interventions that are culturally enriching (e.g. history) or culturally appealing (e.g., extended family). Several African American researchers have advocated the integration of African-American history and African cultural principles such as communalism, into family strengthening program or substance abuse recovery programs (Gilbert, Harvey, and Belgrave, 2009; Harvey & Hill, 2004; Gilbert & Goddard, 2007). These programs educate participants on the strengths of their culture and history to empower them (Gilbert, Harvey, and Belgrave, 2009; Harvey & Hill, 2004; Gilbert & Goddard, 2007). The Maat Africentric Adolescent and Family Rites of Passage program is one example of a cultural enriching community program that encourages family strengthening in addition to substance abuse prevention for children (Harvey & Hill, 2004). Drawing on the strength of extended family is one cultural strength cited in the literature (Jayakody, Chatters, Taylor, 1993). Therefore, family strengthening program may serve as an appealing enhancement

or alternative to treatment. Family strengthening programs have also gained support for their ability to foster healthier parent-child interaction (Emshoff & Price, 1999; Matthew, R., Wang, M., Bellamy, N., & Copeland, E., 2005). Evaluating cultural specific or family strengthening programs impact on African American mothers in recovery could provide directions on how to promote healthy parenting and even recovery without treatment.

Treatment research is also recommended to further explore how African Americans mothers respond to recovery strategies in treatment centers that prioritizes her emotional needs and encourages her use of coping skills. The findings from these types of studies could help tailor substance abuse recovery programs that serve high risk populations. These treatment studies may also benefit from use of longitudinal and qualitative research methods. Longitudinal studies could provide data on the longevity of recovery strategies that address emotional needs and coping skills. These longitudinal data may be helpful in understanding how resilient the recovery strategies are to environment stressors (e.g., poverty) that contribute to African American mothers' higher risk to substance dependency. Qualitative research methods such as interviewing could compliment longitudinal methods by providing greater context on mothers' use of these recovery strategies in their parenting after they leave the treatment program.

More research is needed on why there are differences in maternal expectations of children based on level of education. Education is a frequently used variable when examining maternal parenting behavior (Bavolek, 2001; Erme, et al, 2007; Yu & Gamble, 2008). Yet, few data have been collected to explain the path of influence from maternal education to parenting. The case study is a suitable methodological approach for the detailed level of data collection (Yin, 1993) required to understand how a mother's education influences her parenting.

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