

PREDICTORS OF CAREGIVER INVOLVEMENT IN THE TREATMENT OF CHILD
SEXUAL ABUSE

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

DESIREE ROMAGUERA, PSY.M.

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NEW JERSEY

October 2013

APPROVED:

Craig Springer, Ph.D.

Brenna Bry, Ph.D.

Justin R. Misurell, Ph.D.

DEAN:

Stanley Messer, Ph.D.

Copyright 2013 by Desiree Romaguera

ABSTRACT

This study examined child and caregiver characteristics as predictors of caregivers' participation in their children's group treatment for sexual abuse. Specifically, this study examined children's age, gender, internalizing symptoms, behavioral problems, social competence, and invasiveness and chronicity of abuse, as well as caregiver's identification, income, education, and relationship to the perpetrator as predictors of caregiver attendance of group therapy. The sample consisted of 136 non-offending caregivers and their children, ages 6 through 13. Most families were economically disadvantaged and of African-American or Latino background. Caregivers completed the Child Behavior Checklist (CBCL) and a demographic questionnaire prior to beginning a game-based cognitive-behavioral group therapy program (GB-CBT) for children who have experienced sexual abuse and their caregivers at an urban outpatient center specializing in abuse and maltreatment. A retrospective review of medical charts was conducted to assess the number of group therapy sessions attended by caregivers, the relationship of caregivers to perpetrators, and the type and chronicity of children's abuse. Results indicated that caregivers' biological identification and reports of their children's greater internalizing symptoms and social competence prior to treatment were predictive of higher rates of caregiver attendance of group therapy. Secondary analyses revealed that non-biological caregivers and caregivers who reported fewer internalizing symptoms and lower social competence in their children were less likely to attend treatment. These findings provide useful information for developing strategies to improve treatment engagement of caregivers following CSA.

ACKNOWLEDGMENTS

I would like to thank Dr. Springer, Dr. Misurell, and Dr. Bry for their help in this endeavor and their ongoing support throughout my academic career. Additionally, I would like to thank Dr. Fagley for her guidance on the statistical aspects of this project. Next, I would like to thank the Metropolitan Regional Child Abuse Diagnostic and Treatment Center (RDTC) at Newark Beth Israel Medical Center (NBIMC), located at Wynona's House, for the opportunity to work with families impacted by abuse. This experience had a deep effect on me and led to my interest in this topic. Without their trust and support this project would not have been possible. It is my sincere hope that this research will continue to help improve service delivery for children and families at the Center. Finally, I would like to thank the Graduate School of Applied and Professional Psychology (GSAPP) for a wonderful and challenging experience over the past five years. I take great pride in my association with GSAPP and feel immensely grateful to everyone in the GSAPP family who contributed to my development as a clinician.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	iv
CHAPTER	
I. INTRODUCTION	1
Relationship between Caregiver and Child Functioning	1
Importance of Caregiver Involvement in CSA Treatment.....	2
Predictors of Dropout in Child Psychotherapies.....	6
Aim of Present Study	12
Hypotheses	13
II. METHOD	14
Sample Characteristics	15
Measures	16
GB-CBT	18
Inclusion Criteria	19
Exclusion Criteria	19
III. RESULTS	19
Overview of Analyses.....	19
Caregiver Variables	21
Child Variables	23
Best Model	27
IV. DISCUSSION	28

Significant Findings and Implications	28
Nonsignificant Findings and Explanations	31
Limitations	33
Conclusions and Future Directions	35
REFERENCES	37
TABLES	48

LIST OF TABLES

Table 1. Variables by Category	48
Table 2. Caregiver Identification	49
Table 3. Caregiver Reported Income	50
Table 4. Caregiver Educational Attainment.....	51
Table 5. Invasiveness of Child Abuse.....	52
Table 6. Chronicity of Child Abuse.....	53
Table 7. Summary of Significant Results for Child and Caregiver Variables.....	54
Table 8. Summary of Significant Secondary Results	55
Table 9. Descriptive Data for Attenders Versus Non-attenders	56

Predictors of Caregiver Involvement in the Treatment of Child Sexual Abuse

The important role that caregivers play in children's psychological functioning and general well-being has been well documented (Luthar, 2006; Masten, 2001; Power, 2004). Children's symptomatology and coping are known to be associated with a multitude of family factors including caregivers' psychopathology, levels of stress, interpersonal functioning, attachment, and supportiveness (Bogels & Brechman-Toussaint, 2006; Bolen & Lamb, 2007; Kendall-Tackett, Williams, & Finkelhor, 1993). While the psychological health of caregivers may be impacted by a number of factors, children's symptomatology and behavior are among the most central (Early, Gregoire, & McDonald, 2002). The substantial interaction between child and caregiver functioning highlights the importance of including caregivers in children's psychological treatment.

Literature on childhood disorders consistently demonstrates the importance of caregiver involvement in treatment (Corcoran & Pillai, 2008; Dowell & Ogles, 2010). According to a 1990 survey of psychologists, approximately 80% of clinicians who had treated children had included caregivers in treatment, considered them to be important allies in the therapeutic process, and believed that parent cooperation and involvement had been "quite related" to child outcomes (Kazdin, Siegel, and Bass, 1990). Studies have shown that involving caregivers in children's treatment is associated with positive outcomes across treatment modalities for a range of childhood disorders, including attention deficit/hyperactivity disorder (ADHD), depression, and anxiety disorders (Dowell & Ogles, 2010; Karver, Handelsman, Fields, & Bickman, 2006). This research found that involving parents in children's treatment played a moderating role in

improving child therapeutic outcomes. More specifically, caregiver-involved treatments had better outcomes on caregiver and teacher ratings of children's global functioning, internalizing symptoms, externalizing behaviors, and target symptom severity. Overall, this literature suggests that in order for psychological treatment of children to be optimally successful, caregivers should be actively involved in the therapeutic process.

Caregivers' active involvement is especially important in children's treatment for sexual abuse, since the impact of the abuse often extends well-beyond the child (Kendall-Tackett, et al., 1993; Saywitz, Mannarino, Berliner, & Cohen, 2000; van Toledo & Seymour, 2013). Frequently, caregivers experience a range of negative emotions following CSA, including anger, disbelief, helplessness, sadness and guilt, and cognitive distortions (e.g., the belief that their child is permanently damaged; Deblinger & Heflin, 1996; Lovett, 2004; Mannarino, Cohen, Deblinger, & Steer, 2007; Plummer & Eastin, 2007). The literature has also shown that caregivers commonly experience significant stress following their children's sexual abuse, including losses or changes in income, residence, employment, and support from friends and family (Elliott & Carnes, 2001; Massat & Lundy, 1998; Plummer & Eastin, 2007; van Toledo & Seymour, 2013). Caregivers' own histories of sexual abuse have been shown to relate to greater distress following their children's disclosures (Hebert, Daigneault, Collin-Vezina, & Cry, 2007; Morrison & Clavenna-Valleroy, 1998). Children often recognize the impact that their abuse experiences have on their caregivers, and may blame themselves and internalize these negative feelings (Cohen, Mannarino, & Deblinger, 2006; Deblinger & Heflin, 1996). Children's self-blame and perceptions of being blamed by their caregivers for their abuse have been found to be associated with symptoms of anxiety and depression

and poorer overall functioning (Cohen & Mannarino, 2000; Quas, Goodman, & Jones, 2003; Spaccarelli & Kim, 1995). Furthermore, when caregivers have difficulty coping with the abuse, they may be so consumed with their own emotional well being that they may not have the resources necessary to effectively support their children (Deblinger & Heflin, 1996; Rheingold, Davidson, Resnick, Self-Brown, & Danielson, 2013).

One way that caregivers communicate their difficulty coping with their children's sexual abuse experiences is through their reactions to their children's disclosures and symptoms. Caregivers' responses to their children's abuse experience are fundamental since they influence children's interpretation of the event and subsequent symptomatology (Deblinger & Heflin, 1996; Lovett, 2004). Research has found that caregivers' responses vary as a result of several abuse-related factors including child and perpetrator characteristics (e.g., relationship, age difference, etc.), as well as the circumstances of the abuse (e.g., form of abuse, number of incidents, etc.; Elliott & Carnes, 2001; Lipton, 1997; Massat & Lundy, 1998). Regardless of the specifics, caregivers frequently experience significant distress, which may be communicated to their children through their immediate reactions to children's disclosure of sexual abuse (Cohen et al., 2006; Cyr, McDuff, & Hebert, 2013; Elliott & Carnes, 2001). Children may interpret ambivalence, disbelief, and failure to take action as a lack of support (Lovett, 2004). Caregivers' intense negative affect, poor coping, and threats to harm the perpetrator may also be viewed as unsupportive (Pintello & Zuravin, 2001).

Research has highlighted the impact of caregiver supportiveness on children's functioning following sexual abuse. Caregiver ambivalence and distress have been found to be related to poorer child adjustment, while caregivers' supportiveness has been

associated with better child adjustment (e.g., fewer behavioral symptoms and greater sense of self-worth; Avery, Massat, & Lundy, 1998; Elliott & Carnes, 2001; Kendall-Tackett, et al., 1993; Leifer, Shapiro, & Kassem, 1993; Lipton, 1997; McClure, Chavez, Agars, Peacock, & Matosian, 2008; Morrison & Clavenna-Valleroy, 1998; Tremblay, Hebert, & Piche, 1999; Williams & Nelson-Gardell, 2012). Research has also shown that children of supportive caregivers are more likely to disclose abuse and less likely to recant their disclosures than children with unsupportive caregivers (Elliott & Briere, 1994; Lawson & Chaffin, 1992; Lippert, Cross, Jones, Walsh, 2009; Malloy & Lyon, 2006; Malloy, Lyon, & Quas, 2007). Several studies have shown that children's perceptions of caregiver and overall social support were better predictors of children's psychological adjustment (e.g., externalizing symptoms and global self-worth) following sexual abuse than abuse-specific factors (e.g., duration and invasiveness of the abuse; Johnson & Kenkel, 1991; Rosenthal, Feiring, & Taska, 2003; Spaccarelli & Kim, 1995; Tremblay, et al., 1999). Given the importance of caregiver support on children's functioning, addressing caregiver distress and unsupportiveness in treatment is essential.

Caregiver supportiveness has been conceptualized as providing emotional support, expressing a consistent and unwavering belief in children's disclosures, assigning blame to the perpetrator, and taking action against the perpetrator. Furthermore, taking protective actions for children, such as contacting law enforcement and child protective services, discontinuing contact with the perpetrator, and seeking medical and psychological treatment for the child are central to providing a supportive and appropriate response (Bolen, 2002). Once these initial steps have been taken, caregivers can

communicate ongoing supportiveness through their active involvement in treatment to address their children's mental health needs, as well as their own.

The literature on treatment for child sexual abuse has shown that caregiver involvement in treatment is related to improvements in children's symptomatology, including internalizing symptoms (e.g., anxiety and depressed mood), post-traumatic stress symptoms (e.g., fear, nightmares and intrusive thoughts), externalizing problems (e.g., sexual acting out and aggressive behavior), and academic difficulties (Cohen & Mannarino, 1998; Cohen, et al., 2006; Corcoran & Pillai, 2008; Deblinger, Lippmann, & Steer, 1996; Hubel, Maldonado, Tavkar & Hansen, 2011). Additionally, caregivers have been shown to benefit directly from participation in CSA treatment. Caregiver outcomes have been found to include decreased distress, increased social support, and increased knowledge and skills, which are likely to improve caregivers' abilities to provide their children with adequate support and protection (Cohen, et al., 2006; Deblinger, Lippmann, & Steer, 1996; Hernandez et al., 2009; Ostis, 2003; Saywitz et al., 2000). More specifically, caregivers may need to redefine information and expectations taught to their child to keep them safe from re-victimization. For instance, if caregivers had previously conveyed the message to their children that they should unequivocally obey adults, treatment may help caregivers learn how to clarify which types of requests by adults are appropriate and which ones are not, and how to respond to inappropriate requests. Caregivers may also not have had preexisting knowledge necessary to identify and appropriately respond to their children's abuse-specific needs and symptoms (Elliott & Carnes, 2001; Johnson & Young, 2007; van Toledo & Seymour, 2013). Treatment can provide caregivers with this information, permitting them to be more responsive to their

children's needs. Furthermore, learning parallel skills allows caregivers to reinforce and encourage their children to apply the skills that they acquired in treatment at home and elsewhere. Overall, the benefits of caregivers' involvement in CSA treatment for their children and themselves underscore the importance of involving caregivers in the treatment process.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), the most well researched treatment for child sexual abuse, also recognizes the importance of including caregivers in the treatment process (Cohen et al., 2006; Corcoran & Pillai, 2008; Deblinger & Heflin, 1996). A core component of treatment involves parent skills training, which provides caregivers with the knowledge and skills necessary to ensure their children's safety and improve their children's and their own well-being following child sexual abuse. TF-CBT consists of psychoeducation about child abuse, training in a variety of important skills (i.e., emotional expression, anger management, personal safety, and relaxation), and the use of detailed narratives to process abuse experiences and open lines of communication between children and their caregivers (Cohen et al., 2006). Treatment also aims to address caregivers' trauma and other difficulties following their children's abuse (e.g., feelings of guilt and hopelessness, difficulties with parenting, etc.), which are known to impact child and family functioning. Research on TF-CBT has found that outcomes are improved when caregivers are involved in treatment (Cohen et al., 2006).

Since there is an abundance of evidence for caregiver involvement in child sexual abuse treatment, it is important to ascertain factors that contribute to caregiver engagement and attendance in treatment. Considering that caregivers are necessary in

order for child treatments to occur (e.g., caregivers must provide consent, coordinate transportation, etc.), literature on childhood treatment dropout can be useful in shedding some light on this issue. Specifically, studies have shown that dropout rates for psychological treatment are among the highest for children and adolescents (Topham & Wampler, 2008). Factors related to retention in psychological treatments for children across disorders include therapist training, referral source, distance needed to travel for treatment, previous treatment history, socioeconomic status, marital status of parents, parental stress and work commitments, and child behavior problems (Armbruster & Kazdin, 1994; Fernandez & Eyberg, 2009; Friars & Mellor, 2007; Kazdin & Mazurick, 1994; Kazdin, Mazurick, & Siegel, 1994; Pellerin, Costa, Weems, & Dalton, 2010; Perez, Ezpeleta, & Domenech, 2007; Santiago, Kaltman, & Miranda, 2013; Warnick, Gonzalez, Weersing, Scahill, & Woolston, 2012). More specifically, caregivers were found to be less likely to comply with their children's treatment when children were not self-referred, the therapist was less experienced, travel distance was greater, there was a prior treatment history, caregivers were single and reported greater parenting stress and socioeconomic disadvantage, and children had greater behavioral problems.

Studies of filial and play therapies for children with emotional and behavioral difficulties have shown that dropout rates were higher for caregivers who were younger, single, and lower in educational attainment, and for children who were older and had greater behavioral problems (Campbell, Baker, & Bratton, 2000; Friars & Mellor, 2007; Topham & Wampler, 2008). A possible explanation for these findings is that single caregivers and caregivers with lower educational attainment and income may experience greater difficulty attending therapy due to treatment barriers such as lack of access to

regular transportation and childcare, communication problems (e.g., disconnected phone), and loss of wages due to missing work or leaving early to attend therapy.

Research on parenting programs and outpatient therapy for children with behavioral disorders showed that dropout rates were predicted by caregivers' reports of their children exhibiting greater behavior problems (e.g., defiance and aggression) and being "more difficult than others," as well as caregivers' psychopathology, reports of greater parenting stress, doubts regarding the usefulness of treatment, and maladaptive communication patterns with their children (Friars & Mellor, 2007; Kazdin & Wassell, 2000). Caregivers were more likely to complete treatment if they were hopeful about treatment, had realistic expectations for child outcomes, and regularly practiced strategies to manage their children's behavior despite their children's resistance. Research has also shown that families were more likely to drop out of treatment when children exhibited fewer internalizing symptoms (Kendall & Sugarman, 1997). This may be due to caregivers' perceptions of their children as functioning well and not urgently in need of treatment.

While factors associated with caregiver treatment involvement and dropout have been identified for a variety of child emotional and behavioral disorders, there is paucity of research evaluating factors directly involved in predicting caregiver attendance and involvement for CSA treatment. Since treatment involvement can be conceptualized as a form of caregiver support, evaluating research on factors associated with supportive responses by caregivers following CSA may be useful in attempting to discern which factors may be related to caregiver involvement and dropout of CSA treatment.

Research has shown that caregivers' supportiveness of their children following CSA is related to caregivers' educational attainment and socioeconomic status (Leifer et al., 1993; Lipton, 1997). One study found that caregivers who had lower incomes were less likely to exhibit support for their children (Leifer et al., 1993). Another study found higher educational attainment to predict lower levels of caregiver supportiveness, which was explained as possibly relating to caregivers' sense of shame (Lipton, 1997). However, a more recent investigation showed that caregivers' income and educational attainment were not associated with caregivers' completion of CSA group treatment (Tavkar, 2011).

Research also has linked caregiver supportiveness to the nature of the caregiver's relationship with the perpetrator. Studies of nonoffending mothers of child victims of CSA have shown that mothers were less likely to believe their children and take supportive actions if caregivers were involved in a romantic relationship with the perpetrator at the time of disclosure (e.g., spouse or paramour; Elliott & Carnes, 2001; Everson, Hunter, Runyon, Edelsohn, & Coulter, 1989; Sirles & Franke, 1989). Higher levels of intimacy with, and financial dependence on alleged perpetrators have been found to be associated with lower levels of maternal support and willingness to protect their children following CSA (Elliott & Briere, 1994; Everson et al., 1989; Leifer, Kilbane, & Grossman, 2001; Salt, Myer, Colemann, & Sauzier, 1990). Mothers were especially unlikely to protect their children following CSA if the perpetrator lived in the home at the time of disclosure (Elliott & Briere, 1994; Heriot, 1996; Salt et al., 1990; Sirles & Franke, 1989; Willingham, 2007). Additionally, research has shown that non-offending mothers reported greater symptoms of depression when the perpetrator of their children's abuse was their spouse or paramour (Mannarino, Cohen, Deblinger, & Steer,

2007). Together these findings suggest that caregivers' relationship to the perpetrator and loss of resources following CSA may impact their beliefs and level of distress about the abuse, which may then influence their initiation of, and participation in treatment.

Studies have shown that caregiver supportiveness following CSA is related to children's gender (Bolen & Lamb, 2002; Lyon & Kouloumpos-Lenares, 1987; Pintello & Zuravin, 2001; Salt et al., 1990). More specifically, caregivers were found to be more supportive of a male child. However, other research has not detected a relationship between children's gender and caregiver support (De Jong, 1988; Everson et al, 1989; Heriot, 1996; Sirles & Franke, 1989).

Caregiver supportiveness has been found to be associated with children's age at the time of disclosure (Heriot, 1996; Knott, 2008; Lipton, 1997; Lyon & Kouloumpos-Lenares, 1987; Pintello & Zuravin, 2001; Salt et al., 1990; Sirles & Frank, 1989; Topham & Wampler, 2008; Walker-Descartes, Sealy, Laraque, & Rojas, 2011). Specifically, caregivers were found to be more supportive of younger-aged children, and least supportive of adolescents. An investigation of factors influencing caregivers' completion of CSA group treatment showed that caregivers of younger children were more likely to complete treatment (Tavkar, 2011).

Caregivers may more readily believe the disclosures of younger-aged children because advanced knowledge of sexual activity at a very young age is unusual, and thus seemingly indicative of abuse. Caregivers may also feel more compelled to protect their young children than their older children, especially if older children and adolescents are blamed for their involvement in their abuse experiences (e.g., for not having disclosed sooner or for "knowing better"). In line with this reasoning, research has shown that

mothers were significantly more likely to express anger and be more punitive following CSA of older children (Salt et al., 1990). However, it is important to note that other research has not shown age to be a predictor of caregiver supportiveness (De Jong, 1988; Everson et al., 1989).

Research has also shown links between caregiver supportiveness and the invasiveness and chronicity of their children's abuse experience. Research has shown caregivers to be less supportive following CSA if their children's abuse specifically involved genital penetration, or was chronic (Coohey & O'Leary, 2008; Heriot, 1996; Knott, 2008; Pintello & Zuravin, 2001; Quas et al., 2003; Sirles & Franke, 1989). This may suggest that caregivers have greater difficulty coping with the knowledge that their children experienced highly invasive abuse, and this acts as a barrier to providing adequate support. However, a more recent study found that caregivers who were presented with hypothetical scenarios of their children's CSA reported that they would be compelled to take more protective and supportive actions for their children if the abuse involved greater invasiveness (e.g., penetration; Walker-Descartes et al., 2011).

Research has shown that caregivers' supportiveness is also related to their children's symptoms. More specifically, caregivers of children who do not exhibit sexual acting out following CSA tend to be more supportive (Pintello & Zuravin, 2001). This finding may be related to caregivers' frustration and lower levels of sympathy when their children exhibit these behavior problems.

Finally, caregiver unsupportiveness has been found to be associated with a number of factors, including the perpetrators' adamant denial of the allegations, lack of an eyewitness to the incident(s), lack of physical or medical evidence of the abuse, a

close relationship between the perpetrator and the child and/or caregiver prior to the abuse, and higher caregiver distress (Berliner & Elliott, 1996; Bolen & Lamb, 2004; Bolen & Lamb, 2002). Additionally, one study showed that caregivers who reported greater psychological symptoms were less likely to complete group treatment for CSA (Tavkar, 2010).

Overall, the literature has suggested that greater caregiver knowledge and understanding, as well as higher levels of emotional and financial resources contribute to higher levels of caregiver support. Furthermore, abuse, perpetrator, and child characteristics appear to have an impact on levels of caregiver supportiveness. Research has begun to suggest that these findings may extend to treatment involvement as well. It could be inferred that caregivers who recognize the impact of CSA and utility of treatment would be more involved, while those who lack childcare, transportation resources, and/or those who are struggling to meet their basic needs would have higher dropout rates and lower levels of involvement.

Aim of the Present Study

While the significant role of caregivers in treatment for child sexual abuse has been well-documented, there is a shortage of research assessing factors that contribute to caregiver treatment involvement. The present study aims to expand this literature by examining factors that may be associated with caregiver involvement in a group treatment program for child sexual abuse. A number of caregiver and child characteristics were examined as potential predictors of caregiver attendance in the program (See Table 1).

Hypotheses

The following variables were examined as potential predictors of caregiver attendance in group therapy:

Caregiver Identification. It was expected that caregivers would attend a greater number of group therapy sessions if they were a biological parent (i.e. biological mother or father) as compared to a non-biological parent (i.e., a foster parent, kin foster parent, adoptive parent, or step parent).

Caregiver Educational Attainment. It was expected that caregivers would attend a greater number of group therapy sessions as a function of higher levels of completed education. Specifically, caregivers who completed high school or had a greater level of education were expected to attend a greater number of group therapy sessions than caregivers who did not complete high school.

Caregiver Household Income. It was expected that caregivers would attend greater group therapy sessions as a function of greater household income.

Relationship of Caregiver to Perpetrator. It was expected that caregivers would attend fewer group therapy sessions if they had a history of a romantic relationship with the perpetrator of their child's sexual abuse (i.e., spouse or paramour).

Children's Age. Children's age was examined as a potential predictor of caregiver attendance of treatment. It was expected that caregivers of younger children would have higher attendance rates.

Children's Gender. Children's gender was examined as a potential predictor of caregiver attendance of treatment. It was expected that caregivers of male children would have higher attendance rates than caregivers of female children.

Children's Internalizing Symptoms. It was expected that children's greater internalizing symptoms, as reported by caregivers on the Child Behavior Checklist (CBCL) at the time of screening, would predict greater caregiver treatment attendance.

Children's Behavioral Problems. Children's greater externalizing behavior problems at pre-treatment, as reported by caregivers on the CBCL at the time of screening, were expected to predict lower levels of caregiver treatment attendance.

Children's Social Competence. It was expected that children's greater social competence, as reported by caregivers on the CBCL at the time of screening, would predict greater treatment attendance of their caregivers.

Invasiveness of Child Sexual Abuse. Greater invasiveness of children's sexual abuse, defined as penetration, was expected to predict lower caregiver attendance of group therapy than other forms of sexual abuse, including oral sex, fondling, and other types of abuse.

Chronicity of Child Sexual Abuse. Greater chronicity of children's abuse, defined by greater number of abuse incidents, was expected to predict lower caregiver treatment attendance.

Method

Participants included children and non-offending caregivers who were recruited from a sample of families participating in a treatment outcome study at the Metropolitan Regional Diagnostic and Treatment Center at Newark Beth Israel Medical Center, a hospital-based outpatient clinic specializing in child abuse and maltreatment. All children were referred to the center following an allegation of child sexual abuse and agreed to participate in a larger, treatment outcome study assessing the efficacy of a

game-based cognitive behavioral group treatment (GB-CBT) program for child sexual abuse. This outcome study was approved by the Institutional Review Board (IRB) for the Protection of Human Subjects in Research at Newark Beth Israel Medical Center. All participants were informed of their right to cease their involvement in the study at any point. They were also informed that all records used in this investigation would be treated as confidential and kept in a secured location, which could only be accessed by authorized investigators. All participants consented to participate in this research. The current study, which used data collected during the larger treatment outcome study and also conducted retrospective reviews of medical charts to collect data on an additional variable of interest and code for abuse-related data, was also approved by both the IRB for Rutgers, The State University of New Jersey and IRB of Newark Beth Israel Medical Center.

One hundred and thirty-six children and their non-offending caregivers participated in this study. Sixty-seven percent of the children were female ($n=91$), and 33% were male ($n=45$). Children were predominantly African-American (79%; $n=107$) and Latino (12%; $n=16$), and between the ages of six and 13, with a mean of 8.5 years ($SD=2.0$). Twenty-seven percent of children had experienced penetration ($n=37$), 23% had experienced oral-genital contact ($n=31$), 38% had experienced fondling ($n=51$), and 11% had experienced some other form of abuse ($n=15$; See Table 5). For two percent of the children ($n=2$), type of abuse could not be assessed due to charts being unavailable.

The caregiver sample was predominantly biological mothers (67%; $n=91$), but also included foster parents (15%; $n=20$), kinship foster parents (9%; $n=12$), biological fathers (7%; $n=9$), adoptive parents (2%; $n=3$) and step-parents (1%; $n=1$). Seventy-four

percent of the sample of caregivers were biological parents (n=100), and 26% percent were non-biological parents (n=36; See Table 2). Approximately two-thirds of the families involved in this study reported earning household incomes of less than \$30,000, suggesting that a substantial portion of the study's sample was economically disadvantaged (68%; n=79; See Table 3). Eleven percent of caregivers (n=15) indicated that they had not completed high school, 37% (n=50) reported high school as their highest educational achievement, 28% (n=38) indicated having attended but not completed college, 10% had completed college (n=14) and 2% (n=3) had some graduate or professional schooling. Twelve percent of caregivers (n=16) did not report their educational history (See Table 4). Sixteen percent of caregivers (n= 22) had been intimately involved with the perpetrators of their children's abuse (i.e., former or current spouse or paramour), and 81% percent of the caregivers (n=110) had no reported or chart-documented history of romantic involvement with the perpetrator. For three percent of the sample (n=4), caregivers' relationship to the perpetrator was not clearly indicated in children's medical charts.

Measures

Children and caregivers completed a series of clinical measures as part of a pre-treatment screening for participation in a GB-CBT group therapy program. For the purposes of this study, data was collected using a clinician-administered RDTC Demographic Questionnaire and the Child Behavior Checklist 6-18 year-old version (CBCL/6-18; Achenbach & Edelbrock, 1991).

CBCL. The CBCL/6-18, which is administered to caregivers, consists of 116 items assessing the social, emotional and behavioral symptoms of their child. The

measure includes one overall scale (Total Problems), two composite scales: (Internalizing and Externalizing Problems), and thirteen clinical subscales (Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social competence, Thought Problems, Attention Problems, Rule-breaking, Aggressive behavior, Affective problems, Anxiety problems, Somatic Problems, Attention Deficit, Oppositional Defiant, and Conduct Problems). The CBCL also contains three scales that measure social competency, including Activities, Social Competence, and School Performance. Caregivers were directed to rate their child on each item using a three-point Likert scale ranging from *Not True* (0) to *Very True* (2).

The CBCL has been found to have high test-retest reliability (.93) over one week and good inter-rater reliability (.76; Achenbach & Edelbroch, 1991). The CBCL has high concurrent validity (from .56 to .86) with other tests used to measure behavioral difficulties in children, such as the Conner's [1997a] Parent Rating Scale- Revised and the Behavior Assessment System for Children [BASC] Parent [Reynolds & Kamphaus, 1992a; Achenbach & Edelbrock, 1991]. The measure has also been shown to have good discriminant validity in differentiating children with clinical problems from nonclinical children (Achenbach & Edelbrock, 1991; Achenbach & Rescorla, 2001). The present study used the raw scores of the Internalizing Symptoms, Externalizing Problems, Total Problems and Social Competence subscales.

RDTC Demographic Questionnaire. The demographic questionnaire included questions about children's race (i.e., African-American; Latino; Caucasian; Other) and caregiver's identification (i.e., biological mother; biological father; kin foster parent; foster parent; adoptive parent; step parent), yearly income (i.e., less than \$16,000;

\$16,000-30,000; \$31,000-60,000; \$60,000-\$125,000; \$125,000 and above), and highest level of completed education (i.e., some high school; high school; some college; college; graduate/professional school). Additionally, caregivers indicated the type of abuse their child had experienced (i.e., penetration; oral-genital contact; fondling; other) and the number of known abuse incidents (i.e., 1; 2-5; 6-10; more than 10; unknown).

Chart Review

Reviews of children's medical files, which contained extensive background information, were conducted in order to code for number of group therapy sessions attended by caregivers and caregiver relationship to the perpetrator (i.e., history of romantic relationship or no history). Chart reviews were also used to obtain missing data on type and chronicity of children's sexual abuse.

Treatment

Children participated in Game-Based Cognitive-Behavioral Therapy (GB-CBT), an innovative, empirically-based, 12-session model that uses developmentally appropriate games (DAGs) to provide psychoeducation about abuse and teach emotional expression skills, anger management techniques, personal safety skills and relaxation techniques (Misurell & Springer, 2010). GB-CBT group therapy for caregivers taught similar information and provided guidelines for applying skills at home to maximize their children's treatment gains. The group format gave the additional benefits of peer support and awareness that the children and caregivers were not alone in their experiences. Given the theoretical and practical similarities between TF-CBT and GB-CBT, caregiver participation in GB-CBT treatment for child sexual abuse was expected to have similar implications for child and caregiver outcomes.

Inclusion Criteria

Families were included in the study if they met all three of these criteria: 1) the child made a disclosure of sexual abuse prior to participation in the group program; 2) the child and caregiver completed pre-treatment and post-treatment assessment batteries; 3) the child completed at least eight out of twelve group therapy sessions.

Exclusion Criteria

Families were excluded from the study if any of the following four criteria were met: 1) the child was younger than six years of age; 2) the child expressed active suicidal ideation; 3) the child exhibited severe cognitive impairment or extreme behavioral problems that were expected to interfere with their ability to participate in and benefit from treatment; or 4) the child or caregiver were not fluent in English. Caregiver fluency in English was assessed at pre-treatment by their ability to understand and complete the English form of the CBCL, as well as families' observed and expressed comfort and ability in communicating with clinicians in English about the research and GB-CBT program. Families that reported a preference for Spanish or were determined by clinicians to be better served in Spanish, were provided with appropriate therapeutic services, and their data was not included in this study.

Results

The relationships between child and caregiver variables and number of group therapy sessions attended by caregivers were examined using Pearson's correlations, linear regression and multiple linear regression analyses. Categorical variables were transformed into dichotomous variables for regression analysis, including caregiver identification (biological or non-biological caregiver), caregiver educational attainment

(no high school diploma or high school diploma or greater), and caregiver relationship to perpetrator (history of spouse or paramour relationship or no history), as well as child abuse invasiveness (penetration or other form of abuse). Unknown data on all variables, including number of group therapy sessions attended by caregivers, were treated as missing and not included in analyses. One-tailed Pearson's correlations (r) determined the degree of relationship between each variable, and linear regression analysis determined whether each variable predicted caregiver attendance. A multiple linear regression analysis was used to determine the proportion of variance uniquely explained by each variable (sr^2) and reveal the best model (R^2) for understanding the most significant contributing factors in caregiver group therapy attendance for CSA. A power analysis indicated that the current study had sufficient power ($n > 83$) to detect a large effect size (.35) using multiple regression analysis with eleven predictor variables.

The results have been organized by hypothesis. Each section restates the hypothesis and includes descriptive statistics and correlational, linear, and multiple linear regression findings, with clinical significance indicated. Table 7 provides a summary of the significant findings. When caregivers who attended no sessions were included, the mean number of group sessions attended by caregivers was 3.9 ($SD= 4.3$; $n=132$). When non-attenders were excluded, the mean number of group sessions attended by caregivers was 6.8 ($SD=3.5$; $n=76$). Due to a large number of caregivers in the sample attending zero sessions ($n= 56$), non-attenders were included in the analyses for increased power. Additionally, pair-wise deletion was used to maximize the sample size (n) in each analysis and increase power.

To address the inflated standard deviation and reduced variability with the inclusion of non-attenders (i.e. caregivers who had not attended any group sessions), secondary analyses were conducted to compare non-attenders to attenders (i.e., caregivers who had attended one or more group sessions) on all of the variables. Specifically, one-way analysis of variance (ANOVA) was used for continuous dependent variables (i.e., children's age, internalizing symptoms, behavioral problems, and social competence) and chi-square analyses were conducted for ordinal and categorical dependent variables (i.e., children gender, invasiveness of abuse, chronicity of abuse, caregivers' identification, caregivers' educational attainment, caregiver's income, and caregiver's relationship to perpetrator). Table 8 summarizes the significant secondary findings. Table 9 provides descriptive data on attenders versus non-attenders.

Caregiver Identification

The first hypothesis predicted that biological parents would attend a greater number of group therapy sessions than non-biological parents, which included foster parents, kin foster parents, adoptive parents, or step-parents. A one-tailed correlation revealed that caregiver identification (biological, coded as "1," or non-biological, coded as "2") was significantly negatively correlated with group therapy attendance ($r(132) = -.23, p < .01$). As predicted, biological parents attended significantly more group therapy sessions than non-biological caregivers. In a linear regression analysis, caregiver identification was a significant predictor of caregiver attendance of group therapy ($\beta = -.23, t(130) = -2.64, p < .01$). Biological caregiver identification predicted higher rates of attendance in CSA group treatment. A multiple linear regression analysis showed that caregiver identification uniquely explained variance in caregivers' participation in CSA

treatment $sr^2 = .06, p < .05$). Caregiver identification accounted for 6% of the variance in caregivers' participation of group therapy for CSA. A secondary chi-square analysis comparing attenders to non-attenders based on their caregiver identification revealed that biological caregivers were more likely to attend at least one group therapy session, while non-biological caregivers were more likely to not attend any sessions ($X^2(1, N = 132) = 18.0, p < .01$). See Table 7.

Caregiver Educational Attainment

The next hypothesis stated that greater levels of caregiver educational attainment would predict greater caregiver attendance of group therapy for CSA. As predicted, one-tailed correlational analyses revealed that caregiver educational attainment was significantly positively correlated with group therapy attendance ($r(116) = .12, p > .05$). A linear regression analysis did not find caregiver education to be a significant predictor of caregiver attendance of group therapy ($\beta = .12, t(114) = 1.31, p > .05$). A multiple linear regression analysis did not show caregiver education to contribute uniquely to the variance in caregiver attendance of treatment for CSA ($sr^2 = .02, p > .05$). Similarly, a secondary chi-square analysis comparing attenders to non-attenders in terms of their educational attainment showed that caregivers did not show that attenders and non-attenders differed in terms of their levels of education ($X^2(1, N = 116) = 1.35, p > .05$).

Caregiver Income

The next hypothesis stated that higher caregiver income would predict greater caregiver attendance of group therapy for CSA. A one-tailed correlational analysis revealed that caregiver income was not significantly correlated with group therapy attendance ($r(113) = .11, p > .05$). Additionally, linear regression analysis did not find

caregiver income to be a significant predictor of caregivers' attendance of group therapy ($\beta = .11, t(111) = 1.16, p > .05$). A multiple linear regression analysis did not show caregiver income to contribute uniquely to the variance in caregiver attendance of CSA treatment when all other variables were considered ($sr^2 = .01, p > .05$). Similarly, a secondary chi-square analysis comparing attenders to non-attenders based on household income was nonsignificant ($X^2(4, N = 113) = 2.92, p > .05$).

Caregiver Relationship to Perpetrator

The next hypothesis predicted that caregivers who had histories of romantic involvement with the perpetrator of their children's sexual abuse (i.e. if the perpetrator had been a spouse or paramour) would have poorer group therapy attendance. Caregiver relationship to perpetrator was not found to be correlated with caregivers' group therapy attendance ($r(128) = .01, p > .05$). A linear regression analysis also did not show caregiver relationship to perpetrator to be a significant predictor of caregivers' attendance of group therapy ($\beta = .01, t(126) = 0.12, p > .05$). Similarly, a multiple linear regression analysis did not find caregiver relationship to perpetrator to contribute uniquely to the variance in caregiver attendance of CSA treatment ($sr^2 = .0, p > .05$). Additionally, a secondary chi-square analysis comparing attenders to non-attenders based on the nature of their relationship to the perpetrator was nonsignificant ($X^2(1, N = 128) = 0.0, p > .05$).

Children's Age

The next hypothesis predicted that caregivers of younger children would attend a greater number of group therapy sessions than caregivers of older children. Contrary to the prediction, children's age was not significantly correlated with caregivers' group therapy attendance ($r(132) = .00, p > .05$). A linear regression analysis also did not show

children's age to be a significant predictor of caregivers' group therapy attendance ($\beta = .00$, $t(130) = 0.04$, $p > .05$). A multiple linear regression analysis showed no evidence that children's age contributed uniquely to the variance in caregivers' participation in CSA treatment ($sr^2 = .0$, $p > .05$). Similarly, a secondary ANOVA comparing attenders to non-attenders based on their children's age was nonsignificant ($F(1, 101) = 0.01$, $p < .01$).

Children's Gender

The next hypothesis predicted that caregivers of male children would have greater group therapy attendance than caregivers of female children. Contrary to the prediction, children's gender was not significantly correlated with caregivers' group therapy attendance ($r(132) = .02$, $p > .05$). A linear regression analysis did not show a predictive relationship between children's gender and caregivers' attendance of group therapy ($\beta = 0.02$, $t(130) = 0.2$, $p > .05$). A multiple linear regression analysis showed that children's gender did not contribute uniquely to the variance in caregivers' participation in CSA treatment ($sr^2 = .0$, $p > .05$). Additionally, a secondary chi-square analysis comparing attenders to non-attenders based on their children's gender was nonsignificant ($\chi^2(1, N = 132) = 0.39$, $p > .05$).

Children's Internalizing Symptoms

The next hypothesis stated that greater child internalizing symptoms, as reported by their caregiver on the CBCL, would predict greater caregiver attendance of group CSA treatment. A one-tailed correlation analysis revealed a significant positive correlation between children's internalizing symptoms and caregiver attendance of group therapy ($r(121) = .27$, $p < .01$). Caregivers who reported that their child had greater

internalizing symptoms on the CBCL prior to treatment attended a greater number of group therapy sessions, and caregivers who reported that their child had fewer internalizing symptoms attended fewer group sessions. A linear regression analysis revealed that children's internalizing symptoms significantly predicted caregiver attendance ($\beta = .27, t(119) = 3.1, p < .01$). A multiple linear regression analysis indicated that children's internalizing symptoms accounted for a significant proportion of the variance (6%) in caregivers' attendance of group CSA treatment ($sr^2 = .06, p < .05$). A secondary ANOVA comparing attenders to non-attenders based on their children's internalizing symptoms showed that caregivers who attended one or more group sessions reported greater internalizing symptoms in their children than non-attenders ($F(1,84) = 8.02, p < .01$).

Children's Behavioral Problems

The next hypothesis stated that children's behavioral problems, as indicated by caregivers report on the Externalizing Problems scale of on the CBCL, would predict lower caregiver attendance of group therapy. Caregivers' report of their children's behavioral problems was not significantly correlated with caregiver attendance of group therapy ($r(121) = .07; p > .05$). In a linear regression analysis, children's behavioral problems was not found to significantly predict caregiver attendance of group CSA treatment ($\beta = 0.07, t(119) = 0.73, p > .05$). A multiple regression analysis did not show children's behavioral problems to contribute uniquely to the variance in caregivers' attendance of CSA treatment ($sr^2 = .01, p > .05$). Similarly, a secondary ANOVA comparing attenders to non-attenders based on their children's behavior problems was nonsignificant ($F(1,84) = 0.24, p > .05$).

Children's Social Competence

The next hypothesis stated that children's greater social competence, reported by their caregivers on the CBCL, would predict greater caregiver attendance in group therapy. As expected, a one-tailed correlational analysis revealed a significant positive association between children's social competence and caregivers' attendance of group therapy for CSA ($r(112) = .24, p < .01$). A linear regression analysis revealed that children's social competence was a significant predictor of caregivers' attendance of group therapy ($\beta = .24, t(110) = 2.58, p = .01$). A multiple regression analysis showed that children's social competence accounted for a significant proportion of the variance (5%) in caregivers' attendance of CSA treatment ($sr^2 = .05, p < .05$). Similarly, a secondary ANOVA found that caregivers who attended one or more group sessions reported higher social competence exhibited by their children compared to caregivers who did not attend any sessions ($F(1,78) = 11.01, p < .01$).

Children's Abuse Invasiveness

The next hypothesis stated that greater invasiveness of child sexual abuse would predict lower caregiver attendance in group therapy. Specifically, caregivers of children who had experienced penetration versus other types of abuse were expected to attend fewer group therapy sessions (See Table 5). Child abuse invasiveness was not found to be significantly correlated with caregiver attendance of group therapy for CSA ($r(130) = .12, p > .05$). A linear regression analysis did not show evidence of a predictive relationship between child abuse invasiveness and the number of group sessions attended by caregivers ($\beta = .12, t(128) = 1.37, p > .05$). Similarly, a multiple linear regression analysis did not indicate that child abuse invasiveness contributed uniquely to the

variance in caregiver attendance of CSA treatment ($sr^2 = .01, p > .05$). Additionally, a secondary chi-square analysis comparing attenders to non-attenders based on the invasiveness of their children's abuse was nonsignificant ($\chi^2 (1, N = 130) = 2.32, p > .05$).

Children's Abuse Chronicity

The next hypothesis stated that greater chronicity of children's sexual abuse, defined as greater number of child abuse incidents reported by caregivers on the RDTC Questionnaire, would predict greater caregiver attendance in group therapy (See Table 6). Child abuse chronicity was not found to be significantly correlated with the number of group therapy sessions attended by caregivers ($r(103) = .08, p > .05$). A linear regression analysis did not show a predictive relationship between child abuse chronicity and the number of group sessions attended by caregivers ($\beta = .07, t(101) = 0.7, p > .05$). A multiple linear regression analysis did not indicate that child abuse chronicity contributed uniquely to the variance in caregiver's attendance of CSA treatment ($sr^2 = .0, p > .05$). Similarly, a secondary chi-square analysis comparing attenders to non-attenders based on the chronicity of their children's sexual abuse was nonsignificant ($\chi^2 (1, N = 103) = 4.57, p > .05$).

Best Model

A multiple linear regression analysis revealed that child internalizing symptoms and social competence together contributed significantly (22%) to the variance in caregiver's attendance of group therapy sessions ($R^2 = .22, F(11, 80) = 2.09, p < .05$), with children's internalizing symptoms contributing 6%, children's social competence contributing 5%, and caregivers' identification contributing 6% to the variance. No other

variables examined in this study predicted or uniquely explained caregivers' attendance of group treatment for CSA, in the context of other potential predictors.

Discussion

The literature has discussed the impact of sexual abuse on families and the importance of caregivers' supportive actions following CSA. Previous studies have conceptualized caregiver support in terms of caregivers' belief in their children's disclosures and specific protective actions such as contacting law enforcement and removing the perpetrator from the home (Bolen & Lamb, 2002; Elliott & Carnes, 2001; Heriot, 1996; Pintello & Zuravin, 2001). The present study examined caregiver involvement in treatment as a form of caregiver support. The current study found that a number of child and caregiver characteristics were associated with caregivers' degrees of involvement in group treatment for CSA. These findings are important since caregiver participation in CSA treatment is known to result in improved outcomes for children and caregivers (Cohen, et al., 2006; Dowell & Ogles, 2010; Hernandez et al., 2009; Karver, et al. 2006). It is also important in light of the known risk of recantation when caregivers do not participate in treatment and demonstrate support of their children (Berliner & Elliot, 1996; Elliott & Briere, 1994; Lovett, 2004; Malloy et al., 2007). Furthermore, given the unique benefits of group-based treatment, including decreased sense of aloneness and peer support, the findings provide initial insights for beginning to address barriers to caregiver attendance of CSA treatment in a group context.

The first important finding showed that caregivers' reports of their children's internalizing symptomatology prior to receiving treatment for CSA predicted caregivers' attendance of group therapy. Specifically, caregivers' report of their children's greater

internalizing symptoms predicted higher rates of caregiver attendance. Conversely, caregivers' report of their children's lower internalizing symptoms predicted lower attendance rates. Additionally, differences were detected between attenders and non-attenders, with caregivers who reported greater internalizing symptoms in their children being more likely to attend one or more group sessions, while caregivers who reported lower internalizing symptoms in their children were more likely to not attend treatment. These findings are important in shedding light on the impact of children's internalizing symptomatology on their caregivers' CSA treatment attendance and adding to a body of literature that has tended to focus on children's behavioral problems (Armbruster & Kazdin, 1994; Friars & Mellor, 2007; Topham & Wampler, 2008). The findings may suggest that caregivers who observe a greater degree of internalizing symptoms such as anxiety, depression and withdrawal in their children may perceive their children to be suffering and respond with greater sympathy. These difficulties may create distress in the caregiver, which may, in turn, increase caregivers' motivation and sense of urgency for the family to get help. Research has shown that children's internalizing symptoms were related to caregivers' reports of greater depressive symptomatology following CSA (Mannarino, Cohen, Deblinger, & Steer, 2007). Caregivers who do not perceive their children to be suffering with internalizing symptoms may underestimate the importance of their participation in treatment for CSA. This highlights the need for clinicians to make additional efforts to explain the purpose and usefulness of caregivers' participation in treatment for CSA, especially when children are not exhibiting a great deal of symptoms. Clinicians may emphasize that children can be suffering while their symptoms are not apparent to the caregiver. It is especially important to make these

efforts if it will help to bring caregivers to the first group therapy session, which could motivate their attendance of subsequent sessions.

The results also showed that caregivers' reports of their children's social competence predicted caregivers' attendance of group therapy. Specifically, caregivers' report of their children's greater social competence predicted higher rates of group treatment attendance, and, conversely, caregivers' reports of their children's lower social competence predicted lower caregiver attendance rates. Additionally, differences were detected between attenders and non-attenders, with caregivers who attended one or more group sessions reporting that their children were more socially competent. These findings are especially important in light of the paucity of literature examining children's social competence in relation to caregivers' support of their children following CSA. Research has shown that more socially competent children tend to have caregivers who are more supportive and responsive to their emotional and other needs (Connell & Prinz, 2002). Research has also shown that more socially anxious children tend to have socially anxious parents (Hayward et al., 2008). Caregivers with less socially competent children may be less socially competent themselves, and possibly less comfortable in a group therapy context. Overall, these findings suggest that special efforts must be made in order to ensure the initial and continued engagement of caregivers of less socially competent children in group treatment for CSA. Clinicians may need to emphasize the potential social benefits of the group method of therapy for both the child and the caregiver, including decreased feelings of aloneness and peer feedback and support. Clinicians may also attempt to demystify the therapeutic process and build an early alliance with caregivers prior to the first therapy session so that caregivers may feel more

comfortable attending. Additionally, clinicians may attempt to introduce caregivers who will be participating in the program prior to the start of treatment, and possibly also connect caregivers with other caregivers who have completed the program.

The next important finding showed that caregivers' identification was associated with their attendance of group therapy. Biological caregiver identification predicted greater rates of participation in group therapy. Additionally, differences were detected when attenders were compared to non-attenders based on caregiver identification. Biological caregivers were more likely to attend one or more sessions; whereas non-biological caregivers were more likely not to attend any sessions. These findings extend the literature on childhood behavioral disorders to CSA, showing that biological caregivers, as compared to non-biological caregivers, are more likely to be involved in treatment (Armbruster & Kazdin, 1994; Kazdin & Mazurick, 1994; Kazdin, Mazurick, & Siegel, 1994). Biological caregivers may experience greater distress and a greater need to attend treatment to address their own difficulties related to the abuse, in addition to their children's difficulties (Lipton, 1997). Biological caregivers' greater attendance rates may also be due to their strong attachment and bond with the child (Bolen & Lamb, 2002). Clinicians may improve caregivers' engagement in treatment by demonstrating greater sensitivity to the unique challenges and needs of both biological and non-biological caregivers, such as coping and communicating with their child about CSA, and emphasizing the potential benefits of treatment participation for all caregivers.

The present study did not detect associations between caregivers' attendance of group CSA treatment and children's gender, age, behavioral problems, abuse chronicity, or abuse invasiveness. Additionally, no associations were found between caregivers'

attendance rates and their education, income or relationship to the perpetrator of their children's abuse. While the present study did not detect associations that were found by previous studies, there are a number of factors that differentiate this study from previous research. As discussed, the current study conceptualized caregiver support differently. This study also examined treatment involvement differently than previous research. Specifically, this research examined treatment attendance (i.e., number of sessions; attendance versus non-attendance) rather than treatment dropout (Kazdin, 1996; Kazdin & Mazurick, 1994; Topham & Wampler, 2008). Also, while previous studies involved play or filial therapies (Campbell, et al., 2000; Topham & Wampler, 2008), the current study evaluated caregivers' attendance of group therapy. Additionally, differential sample characteristics may further explain these unexpected results. Whereas many previous studies had more homogeneous samples of biological mothers and examined intrafamilial sexual abuse specifically, usually in the context where the perpetrator lived in the home at the time of the abuse, the current study did not restrict the sample in terms of caregiver identification and abuse contexts.

In interpreting these findings and their implications, it is important to consider the demographic characteristics of the current sample. Given that the majority of the families were African-American and Latino, certain cultural factors may partly explain the overall sample's underutilization of psychotherapy services for CSA. For example, African-Americans' distrust for child protection and mental health systems and professionals, related to historical persecution and racism, may keep caregivers from engaging in psychotherapy (Santiago et al., 2013). Also, among Latino mothers, shame and guilt about their child's sexual abuse, as well as secrecy about the abuse both within and

outside of the family, may impact their willingness to participate in CSA treatment (Lovett, 2004). To improve caregivers' involvement in treatment, clinicians should be sensitive to cultural factors that may impact caregivers' perceptions and experience of treatment, and make efforts to build trust, such as remaining transparent with caregivers and checking in regularly about treatment (Springer & Misurell, 2011).

Limitations

There were a number of limitations associated with this study. There was a large number of caregivers who did not attend any sessions (n=56), which limited the variability of the dependent variable and power to detect some of the expected results. Additionally, for certain predictor variables the method of coding decreased variability and power. For example, caregiver income and abuse chronicity were both coded in ranges (e.g., \$16-30,000; 2-5 incidents), and abuse invasiveness was coded dichotomously (e.g., penetration versus other forms of abuse). Furthermore, household income alone may not accurately reflect the degree of economic disadvantage experienced by a family. For instance, a family of four living on \$30,000 yearly income may experience more financial stress than a family of two living on the same income. Additionally, power was generally limited by missing data, which could not be collected due to the retrospective nature of this study. As such, pair-wise deletions were conducted to increase the sample size for each analysis; however, this method did not allow for one consistent group of participants to be examined. The current study was also limited by the use of chart review to assess caregivers' relationship to perpetrators. Due to a lack of specific information in children's medical charts on the nature of caregivers' relationships to perpetrators at the time of the abuse disclosure, caregiver relationship to

perpetrator was coded in terms of relationship history. Finally, there was an underrepresentation of Caucasian, Bi-racial, and “other background” families in this study, which contributes to uncertainty about the generalizability of the current study’s findings. However, examining predominantly African-American and Latino families can also be considered a strength of the study, as it allows for an improved understanding of these understudied populations.

In terms of logistical limitations, caregiver attendance may have been artificially depressed due to the scheduling of the caregiver group. As a result of resource limitations, the caregiver group was held once a week after one of the children’s groups. Caregivers whose children attended group on that particular day would need to wait for their child’s group to be completed prior to attending their own group. This would necessitate that some clients had to stay at the Center for three hours; a significant time commitment for busy families. Other caregivers, whose children attended group on a different day than the caregiver group was scheduled, would need to make two trips per week to the Center, which could also be difficult for busy families and families with limited income.

In spite of the efforts employed in the present study to engage caregivers, such as making reminder phone calls and speaking with caregivers in person about the importance for the child’s treatment and potential benefits for the caregiver of attending group therapy, caregiver involvement was still low. It is important to consider that the population being served by the RDTC is largely economically disadvantaged and faces other daily challenges that interfere with treatment engagement.

Conclusions and Future Directions

Future research should involve a study in which all data of interest are actively being collected, so as to minimize missing data. This would increase power to find significant results and would eliminate the need for pair-wise deletion, which would ensure that each analysis examines the same sample of participants. Research should further examine the link between caregiver relationship to the perpetrator and caregiver attendance of their children's treatment for CSA using a different method of data collection, such as a semi-structured interview with caregivers prior to treatment about their relationship to the perpetrator. Research should focus specifically on caregivers' current relationship with the perpetrator and degree of financial dependence on the perpetrator as predictors of caregiver attendance of group CSA treatment. In terms of logistical barriers, engagement may be improved if caregiver and child groups are run concurrently, thereby making it more convenient for families.

Considering that previous literature has focused on predictors of caregivers' belief in their children's disclosures and protective actions following CSA, future research should examine caregivers' degrees of belief in their children's disclosures and protective behaviors outside of their treatment attendance as potential predictors of caregiver involvement in group CSA treatment. This could also be assessed in a semi-structured interview prior to treatment. Finally, future research may wish to examine other potential predictors of caregiver involvement in group CSA treatment, such as children's prior treatment history and referral source (e.g., self or other), travel distance to the treatment site, number of children in the family. Additionally, research should examine caregivers' age, race, marital status, parenting stress and social support, beliefs about psychological

treatment, psychopathology, and histories of sexual abuse or other violence as predictors of their involvement in CSA treatment.

Caregiver involvement in children's treatment for sexual abuse has important implications for both child and family functioning. This study's identification of variables that predict caregivers' participation in treatment provides a beginning for understanding how clinicians can help to engage caregivers in the therapeutic process, especially in cases where caregivers are less likely to attend on their own accord. It is important for future research to identify additional factors that may influence caregiver involvement, with particular attention given to the role of cultural factors (Misurell & Springer, 2011). The current study and future investigations will enable clinicians to develop strategies for increasing caregiver participation in treatment for child sexual abuse.

References

- Achenbach, T., & Edelbrock, C. (1991). *Manual for the Child Behavior Checklist 4–18 and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Achenbach, T.M., & Rescorla, L.A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth & Families.
- Armbruster, P., & Kazdin, A. E. (1994). Attrition in child psychotherapy. In T.H. Ollendick & R. J. Prinz (Eds.), *Advances in clinical child psychology* (Vol 16, pp.18 – 108]. New York: Plenum.
- Avery, L., Massat, C. R., & Lundy, M. (1998). The relationship between parent and child: Reports of parental supportiveness and psychopathology of sexually abused children. *Child and Adolescent Social Work, 15*, 187–205.
- Berliner, L., & Elliott, D. M. (1996). Sexual abuse of children. In Briere, J., Berliner, L., Buckley, J. A., Jenny, C., & Reid, T. (eds.), *The APSAC Handbook on Child Maltreatment*, Sage, Thousand Oaks, CA, pp. 51–71.
- Bogels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*, 834-856.
- Bolen, R. (2002). Guardian support of sexually abused children: A definition in search of a construct. *Trauma, Violence, and Abuse, 3*, 40-67.
- Bolen, R. M., & Lamb, J. L. (2002). Guardian support of sexually abused children: A study of its predictors. *Child Maltreatment, 7*, 265-276.
- Bolen, R. M., & Lamb, J. L. (2004). Ambivalence of nonoffending guardians after child sexual abuse disclosure. *Journal of Interpersonal Violence, 19*, 185-211.

- Bolen R. M., & Lamb, J. L. (2007). Parental support and outcome in sexually abused children. *Journal of Child Sexual Abuse, 16*, 33-54.
- Briere, J. N., & Elliott, D. M. (1994). Immediate and long-term impacts of child sexual abuse. *Future of Children, 4*, 54-69.
- Campbell, V. A., Baker, D. B., & Bratton, S. (2000). Why do children drop-out from play therapy? *Clinical Child Psychology and Psychiatry, 5*, 133-138.
- Cohen, J., & Mannarino, A. (2000). Predictors of treatment outcome in sexually abused children. *Child Abuse and Neglect, 24*, 983-994.
- Cohen, J., & Mannarino, A., (1998). Factors that mediate treatment outcome of sexually abused preschool children: Six- and 12-month follow up. *Journal of the American Academy of Child & Adolescent Psychiatry, 37*, 44-51.
- Cohen, J., Mannarino, A., & Deblinger, E. (2006). *Treating Trauma and Traumatic Grief. In Children and Adolescents.* Guildford Press: New York, NY
- Conners, C.K. (1997a). *Conners' Parent Rating Scale-Revised.* North Tonawanda, NY: Multi-Health Systems.
- Connell, C. M., & Prinz, R. J. (2002). The impact of childcare and parent-child interactions on school readiness and social skills development for low-income African-American children. *Journal of School Psychology, 40*, 177-193.
- Coohey, C. & O'Leary, P. (2008). Mothers' protection of their children after discovering they have been sexually abused: An information-processing perspective. *Journal of Child Abuse and Neglect, 32*, 245-259.
- Corcoran, J. & Pillai, V. (2008). A meta-analysis of parent-involved treatment for child sexual abuse. *Research on Social Work Practice, 18*, 453-464.

- Cyr, M., McDuff, P., & Hebert, M. (2013). Support and profiles of nonoffending mothers of sexually abused children. *Journal of Child Sexual Abuse, 22*, 209-230.
- De Jong, A. R. (1988). Maternal responses to the sexual abuse of their children. *Pediatrics, 81*, 602-609.
- Deblinger, E., & Heflin, A. H. (1996). *Treating sexually abused children and their nonoffending parents*. Thousand Oaks, CA: Sage.
- Deblinger, E., Lippman, J., & Steer, R. (1996). Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. *Child Maltreatment, 1*, 310-321.
- Dowell, K. A., & Ogles, B. M. (2010). The effects of parent participation on child psychotherapy outcome: A meta-analytic review. *Journal of Clinical Child and Adolescent Psychology, 39*, 151-62.
- Early, T. J., Gregoire, T. K., & McDonald, T. P. (2002). Child functioning and caregiver well-being in families of children with emotional disorders: A longitudinal analysis. *Journal of Family Issues, 23*, 374-391.
- Elliott, D.M., & Briere, J. (1994). Forensic sexual abuse evaluations of older children: Disclosures and symptomatology. *Behavioral Sciences and the Law, 12*, 261-277.
- Elliott, A. N., & Carnes, C. N. (2001). Reactions of non-offending parents to the sexual abuse of their child: A review of the literature. *Child Maltreatment, 6*, 314-331.
- Everson, M. D., Hunter, W. M., Runyon, D.S., Edelsohn, G. A., & Coulter, M. L. (1989). Maternal support following disclosure of incest. *American Journal of Orthopsychiatry, 59*, 197-207.

- Fernandez, M. A., & Eyberg, S. M. (2009). Predicting treatment and follow-up attrition in parent-child interaction therapy. *Journal of Abnormal Child Psychology*, 37, 431-441.
- Friars, P. M., & Mellor, D. J. (2007). Drop out from behavioral management training programs for ADHD: A prospective study. *Journal of Child and Family Studies*, 16, 427-441.
- Hayward, C., Wilson, K. A., Lagle, K., Kraemer, H. C., Killen, J. D., & Taylor, C. B. (2008). The developmental psychopathology of social anxiety in adolescents. *Depression and Anxiety*, 25, 200-206.
- Hebert, M., Daigneault, I., Collin-Vezina, D., & Cyr, M. (2007). Factors linked to distress in mothers of children disclosing sexual abuse. *Journal of Nervous and Mental Disease*, 195, 805-811.
- Heriot, J. (1996). Maternal protectiveness following the disclosure of intrafamilial child sexual abuse. *Journal of Interpersonal Violence*, 11, 181-194.
- Hernandez, A., Ruble, C., Rockmore, L., McKay, M., Messam, Taiwana, Harris, M., & Hope, S. (2009). An integrated approach to treating non-offending parents affected by sexual abuse. *Social Work in Mental Health*, 7, 533-555.
- Hubel, G.S., Maldonado, R.C., Tavkar, P., Hansen, D.J., & Flood, M.F. (2011). Group treatment for a sexually abused child and a nonoffending caregiver: Case study and discussion. *Clinical Case Studies*, 10, 360-375.
- Johnson, B. K., & Kenkel, M. B. (1991). Stress, coping, and adjustment in female adolescent incest victims. *Child Abuse and Neglect*, 15, 293-305.

- Johnson, M. J., & Young, A. (2007). Cognitive-behavioral group treatment for child sexual abuse. In R. W. Christner, J. L. Stewart, & A. Freeman (Eds.), *Handbook of cognitive-behavioral group therapy with children and adolescents* (pp. 273–291). New York, NY: Routledge.
- Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2006). Meta-analysis of therapeutic relationship variables in family therapy: The evidence for different relationship variables in the child and adolescent treatment outcome literature. *Child Psychology Review*, 26, 50-65.
- Kazdin, A. E. (1996). Dropping out of child psychotherapy: Issues for research and implications for practice. *Clinical Child Psychology and Psychiatry*, 1, 133-156.
- Kazdin, A. E., & Mazurick, J. (1994). Dropping out of child psychotherapy: Distinguishing early and late dropouts over the course of treatment. *Journal of Consulting and Clinical Psychology*, 62, 1069-1074.
- Kazdin, A. E., Mazurick, J., & Siegel, T. (1994). Treatment outcome among children with externalizing disorder who terminate prematurely versus those who complete psychotherapy. *American Academy of Child Adolescent Psychiatry*, 33, 549-559.
- Kazdin, A. E., Siegel, T. C., & Bass, D. (1990). Drawing upon clinical practice to inform research on child and adolescent psychotherapy: A survey of practitioners. *Professional Psychology: Research and Practice*, 21, 189–198.

- Kazdin, A. E., & Wassell, G. (2000). Predictors of barriers to treatment and therapeutic change in outpatient therapy for antisocial children and their families, *Mental Health Services Research*, 2, 27-40.
- Kendall, P. C., & Sugarman, A. (1997). Attrition in the treatment of childhood anxiety disorders. *Journal of Consulting and Clinical Psychology*, 6, 883-889.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164-180.
- Knott, T. (2008). *Testing the maternal response hypothesis in cases of suspected or substantiated child sexual abuse: Secondary data analysis of the Canadian incidence study of reported child abuse and neglect, 1998*. (Unpublished doctoral dissertation). University of Toronto, Canada
- Lawson, I., & Chaffin, M. (1992). False negatives in sexual abuse interviews. *Journal of Interpersonal Violence*, 7, 532-542.
- Leifer, M., Kilbane, T., & Grossman, G. (2001). A three generational study comparing the families of supportive and unsupportive mothers of sexually abused children. *Child Maltreatment*, 6, 353-364.
- Leifer, M., Shapiro, J. P., Kassem, L (1993). The impact of maternal history and behavior upon foster placement and adjustment in sexually abused girls. *Child Abuse and Neglect*, 17, 755-766.
- Lippert, T., Cross, T. P., Jones, L., & Walsh, W. (2009) Telling interviewers about sexual abuse: Predictors of disclosure at forensic interviews. *Child Maltreatment*, 14, 100-113.

- Lipton, M. (1997). The effect of the primary caretaker's distress on the sexually abused child: A comparison of biological and foster parents. *Child and Adolescent Social Work, 14*, 115–127.
- Lovett, B. B. (2004). Child sexual abuse disclosure: Maternal response and other variables impacting the victim. *Child and Adolescent Social Work Journal, 21*, 355-371.
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (2nd ed., pp. 739– 795). New York: Wiley.
- Lyon, E., & Kouloumpos-Lenares, K. (1987). Clinician and state children's services worker collaboration in treating sexual abuse. *Child Welfare, 6*, 517-527.
- Malloy, L. C., & Lyon, T. D. (2006). Caregiver support and child sexual abuse: Why does it matter? *Journal of Child Sexual Abuse, 15*, 97-103.
- Malloy, L. C., Lyon, T. D., & Quas, J. A. (2007). Filial dependency and recantation of child sexual abuse allegations. *Journal of the American Academy of Child and Adolescent Psychiatry, 4*, 162-171.
- Mannarino, A., Cohen, J., Deblinger, E., & Steer, R. (2007). Self-reported depression in mothers of children who have experienced sexual abuse. *Journal of Psychopathology and Behavioral Assessment, 3*, 203-211.
- Massat, C. R., & Lundy, M. (1998). "Reporting costs" to nonoffending parents in cases of interfamilial child sexual abuse. *Child Welfare, 77*, 371-388.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.

- McClure, F., Chavez, D., Agars, M., Peacock, M., & Matosian, A. (2008). Resilience in sexually abused women: Risk and protective factors. *Journal of Family Violence, 2*, 81-89.
- Misurell, J., & Springer, C. (2011). Developing culturally responsive evidence-based practice: A game-based group therapy program from child sexual abuse. *Journal of Child and Family Studies, 22*, 137-149.
- Misurell, J., & Springer, C. (2010). Game-Based Cognitive-Behavioral Therapy (GB-CBT): An innovative group treatment program for children who have been sexually abused. *Journal of Child and Adolescent Trauma, 3*, 163-180.
- Morrison, N. C., & Clavenna-Valleroy, J. (1998). Perceptions of maternal support as related to self-concept and self-report of depression in sexually abused female adolescents. *Journal of Child Sexual Abuse, 7*, 23-40.
- Ostis, C. M. (2003). Social support and treatment for nonabusing parents of abused and abusing children: Evaluation of a metaphor-enhanced psychoeducational group curriculum. *Dissertation Abstracts International, A: Humanities and Social Sciences, 63*, 4096A.
- Pellerin, K.A., Costa, N. M., Weems, C. F., & Dalton, R. F. (2010). An examination of treatment completers and non-completers at a child and adolescent community mental health clinic. *Community Mental Health Journal, 46*, 273-281.
- Perez, R. G., Ezpeleta, L., & Domenech, J. M. (2007). Features associated with the non-participation and drop out by socially-at-risk children and adolescents in mental-health epidemiological studies. *Social Psychiatry and Psychiatric Epidemiology, 42*, 251-258.
- Pintello, D. & Zuravin, S. (2001). Intrafamilial child sexual abuse: predictors of post-disclosure maternal belief and protective action. *Child Maltreatment, 6*, 344-352.

- Plummer, C. A., & Eastin, J. (2007). The effect of child sexual abuse allegations/investigations on the mother/child relationship. *Violence Against Women, 13*, 1053-1071.
- Power, T.G. (2004). Stress and coping in childhood: The parents' role. *Parenting: Science and Practice, 4*, 271-317.
- Quas, J., S., Goodman, S., & Jones, D. P. H. (2003). Predictors of attributions of self-blame and internalizing behavior problems in sexually abused children. *Journal of Child Psychology & Psychiatry & Allied Discipline, 44*, 723-736.
- Reynolds, C.R., & Kamphaus, R.W. (1992a). *Behavioral Assessment System for Children. Parent Rating Scales*. Circle Pines, MN: American Guidance Service.
- Rheingold, A. A., Davidson, T. M., Resnick, H., Self-Brown, S., & Danielson, C. K. (2013). The relationship between knowledge and child and caregiver distress during the medical examination for child sexual abuse. *Journal of Child Sexual Abuse, 22*, 552-571.
- Rosenthal, S., Feiring, C., & Taska, L. (2003). Emotional Support and adjustment over a year's time following sexual abuse discovery. *Child Abuse and Neglect, 27*, 641-661.
- Salt, P., Myer, M., Colemann, L., & Sauzier, M. (1990). The myth of the mother as "accomplice" to child sexual abuse. In B. Gomes-Schwartz, J. M. Horowitz, & A. P. Cardarelli (Eds.), *Child sexual abuse: The initial effects* (pp. 109-131). Newbury Park, CA: Sage.
- Santiago, C. D., Kaltman, S., & Miranda, J. (2013). Poverty and mental health: How do low-income adults and children fare in psychotherapy? *Journal of Clinical Psychology: In Session, 69*, 115-126.

- Saywitz, K., Mannarino, A., Berliner, L., & Cohen, J. (2000). Treatment for sexually abused children and adolescents. *American Psychologist*, 55, 1040-1049.
- Sirles, E., A., & Franke, P. J. (1989). Factors influencing mother's reactions to intrafamilial sexual abuse. *Child Abuse and Neglect*, 13, 131-139.
- Spaccarelli, S. & Kim, S. (1995) Resilience criteria and factors associated with resilience in sexually abused girls. *Child Abuse and Neglect*, 19, 1171 -1182.
- Tavkar (2011). *Psychological and support characteristics of parents of child sexual abuse victims: Relationship with child functioning and treatment*. (Unpublished doctoral dissertation). University of Nebraska –Lincoln, Nebraska.
- Topham, G., & Wampler, (2008). Predicting dropout in a filial therapy program for parents and young children. *The American Journal of Family Therapy*, 36, 60–78.
- Tremblay, C., Hebert, M., & Piche, C. (1999). Coping strategies and social support as mediators of consequences in child sexual abuse victims. *Child Abuse & Neglect*, 23, 929-945.
- van Toledo, A., & Seymour, F. (2013). Interventions for caregivers of children who disclose sexual abuse: A review. *Clinical Psychology Review*, 33, 772-781.
- Walker-Descartes, I. Sealy, Y. M., Laraque, D., & Rojas, M. (2011). Caregiver perceptions of sexual abuse and its effect on management after a disclosure. *Child Abuse and Neglect*, 35, 437-447.
- Warnick, E. M., Gonzalez, A., Weersing, R., Scahill, L., & Woolston, J. (2012). Defining dropout from youth psychotherapy: How definitions shape the prevalence and predictors of attrition. *Child and Adolescent Mental Health*, 17, 76-85.

Williams, J., & Nelson-Gardell, D. (2012). Predicting resilience in sexually abused adolescents. *Child Abuse and Neglect*, 36, 53-63.

Willingham, E. U. (2007). *Maternal Perceptions and Responses to Child Sexual Abuse*. (Unpublished doctoral dissertation). Georgia State University, Georgia

Table 1

Variables by Category

<i>Caregiver</i>	<i>Child</i>
<i>Identification</i>	<i>Age</i>
<i>Educational Attainment</i>	<i>Gender</i>
<i>Income</i>	<i>Internalizing Symptoms</i>
<i>Relationship to Perpetrator</i>	<i>Behavioral Problems</i>
	<i>Social Competence</i>
	<i>Abuse Invasiveness</i>
	<i>Abuse Chronicity</i>

Table 2

Caregiver Identification

Caregiver Identification	Frequency	Percent	Cumulative Percent
Biological Mother	91	66.9	66.9
Biological Father	9	6.6	73.5
Kin Foster Parent	12	8.8	82.4
Foster Parent	20	14.7	97.1
Adoptive Parent	3	2.2	99.3
Step Parent	1	0.7	100.0
Biological Parent	100	73.5	
Non-Biological Parent	33	26.5	

Table 3

Caregiver Reported Income

Household Income*	Frequency	Percent	Cumulative Percent
Less than 16,000	41	30.1	35.0
16-30,000	38	27.9	67.5
31-60,000	22	16.2	86.3
60-125,000	13	9.6	97.4
125,000 and above	3	2.2	100.0
Unknown	19	14.0	

* In dollar amounts

Table 4

Caregiver Educational Attainment

Highest Completed Education	Frequency	Percent	Cumulative Percent
Some high school	15	11.3	12.6
High school	50	40.0	55.0
Some College	38	30.0	86.8
College	14	10.6	98.0
Graduate/Professional	3	1.9	100.0
Unknown	16	11.8	

Table 5

Invasiveness of Child Abuse

Type of Abuse	Frequency	Percent	Cumulative Percent
Penetration	37	27.2	27.6
Oral-genital contact	31	22.8	50.7
Fondling	51	37.5	88.8
Other	15	11.0	100.0
Unknown	2	1.5	

Table 6

Chronicity of Child Abuse

Number of Incidents	Frequency	Percent	Cumulative Percent
1	53	39.0	49.5
2-5	36	26.5	83.2
6-10	7	5.1	89.7
Greater than 10	11	8.1	100.0
Unknown	29	21.3	

Table 7

Summary of Significant Results for Child and Caregiver Variables

	Correlation	(R^2)
<i>Child</i>		
Social competence	$r = .24^{**}$	5%
Internalizing Symptoms	$r = .27^{**}$	6%
<i>Caregiver</i>		
Identification	$r = -.23^*$	6%

* indicates $p < .05$

** indicates $p < .01$

Table 8

Summary of Significant Secondary Results

	ANOVA	Chi-Square
<i>Child</i>		
Internalizing Symptoms	$F= 8.02^{**}$	
Social Competence	$F= 11.01^{**}$	
<i>Caregiver</i>		
Identification		$X^2= 18.0^{**}$

* indicates $p < .05$

** indicates $p < .01$

Table 9

Descriptive Data for Attenders Versus Non-attenders

	<u>Attenders</u>	<u>Non-attenders</u>
<u>Caregivers</u>		
Identification	Biological: 87%	Biological: 54%
Education	No Diploma: 9%	No Diploma: 14%
Annual Income	< \$30,000: 61%	< \$30,000: 55%
Relationship to Perpetrator	Romantic: 16%	Romantic: 16%
<u>Children</u>		
Gender	Female: 65%	Female: 70%
Age	M= 8.61, SD= 1.98	M= 8.36, SD= 2.0
Internalizing Symptoms (raw score)	M= 10.59, SD= 7.84	M= 5.92, SD= 6.68
Behavior Problems (raw score)	M= 10.28, SD= 7.12	M= 9.64, SD= 9.82
Social Competence (raw score)	M= 5.7, SD= 2.36	M= 5.14, SD= 2.21
Abuse Invasiveness	Penetration: 32%	Penetration: 20%
Abuse Chronicity	> 1 incident: 46%	> 1 incident: 31%