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Factors Associated with Participation and Retention in a Group Treatment for Child Sexual Abuse

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Abstract

The current study examines factors associated with participation and retention in a child sexual abuse (CSA) outpatient program. Participation and retention are vital if children are to receive the intended benefits of treatment designed to promote healthy coping following CSA. However, little is known about factors that impede or encourage families to consistently attend sessions. Several factors possibly related to child participation and retention were examined, including demographic variables such as income level and education, characteristics of the abuse, and parent and family pretreatment functioning. Participants in the sample included 175 children and adolescents and their non-offending primary caregivers seeking cognitive-behavioral group treatment at an outpatient clinic following disclosure of CSA by the participating child. Pretreatment assessment data and records of treatment attendance, gathered as part of a larger research endeavor evaluating the effectiveness of the treatment protocol, were utilized. The results indicated that demographic variables reflective of reduced structural barriers to treatment seeking (e.g., higher income) have a positive effect on participation and retention. Results did not indicate a relationship between abuse characteristics and participation and retention. Finally, mixed results regarding parent and family functioning emerged. While significant relationships were not found across all measures; several analyses indicated a positive relationship between parental functioning, family functioning, and participation and retention. Implications of the study's results for clinicians who are aiming to engage families in treatment following CSA are presented. Informed about factors that promote retention and steady participation, clinicians will be able to identify and ameliorate difficulties that may lead to either inconsistent attendance or discontinued treatment.

Child sexual abuse (CSA) is a continual and troublesome problem in society. According to the U.S. Department of Health and Human Services (2010), 69,184 children were sexually abused in the United States in 2009 alone. Twenty percent of women and 8% of men have experienced CSA at some point during their childhood (Trask, Walsh, & DiLillo, 2010). These prevalence rates only tell a portion of the story, as many incidents of abuse are never reported to researchers or authorities (Lalor & McElvaney, 2010).

A universal definition of CSA has been debated by lawyers and professionals regarding multiple components, such as what age range signifies childhood, what acts are considered sexual in nature, and how the intent of the perpetrator can be determined (Goldman & Padayachi, 2000; Haugaard, 2000). The age at which childhood ends ranges from 15 to 18, depending on the study (Lalor & McElvaney, 2010). An inclusive definition of CSA comprises a range of actions including intercourse, attempted intercourse, oral-genital contact, fondling of genitals either directly or through clothing, exhibitionism or exposing children to adult sexual activity or pornography, and the use of child for prostitution or pornography (Putnam, 2003). The intent of the perpetrator is determined as behavior that is corrupt, improper, or is deemed abusive depending on cultural values (Haugaard, 2010).

Children and families who experience CSA are a diverse group, representing a broad range on the socio-demographic spectrum; however, there are some factors that may increase risk of victimization. Girls are at a two-and-a-half to three times higher risk of becoming a victim of CSA than boys (Fergusson, Lynskey, & Horwood, 1996). When one or both parents are absent, the risk for children to be sexually abused increases tremendously (Finkelhor, 1993). The presence of a step-father in a blended family nearly doubles the risk for girls, not only for the possibility of experiencing abuse perpetrated by step-fathers, but also by other men who have been present in the household (Mullen, Martin, Anderson, Romans, & Herbison, 1993). Other factors that may increase the likelihood of CSA are low cohesion amongst the family, low socio-economic status, variances in marital status, and limited social support from the family (Pereda, Guilera, Forns, & Gomez-Benito, 2009).

Children who experience sexual abuse are more likely to experience victimization again. CSA survivors in adulthood are between two and 11 times more likely to experience sexual assault compared to non-victims of CSA (Messman-Moore & Long, 2003). Sexually abused children are more likely to be abused again as adolescents, who then in turn are more likely to be sexually revictimized as adults (Classen, Palesh, & Aggarwal, 2005). Some factors contributing to the possibility of revictimization are

the severity of the initial sexual abuse and the co-existence of physical abuse (Classen et al., 2005). A study conducted by Russell (1986) found that 63% of women who experienced intrafamilial abuse before age 14 also experienced rape or attempted rape after age 14. This percentage, compared to the 35% of those women included in the study who did not report childhood sexual abuse but experienced rape or attempted rape, suggests that CSA doubles the risk of sexual victimization in adolescence or adulthood. Research over the past decade has consistently replicated such results, with revictimization rates varying across different studies, ranging from almost 14% (Humphrey & White, 2000) to 27% (McGee, Gairavan, de Barra, Byrne, & Conroy, 2002).

Sexual abuse has a heterogeneous range of effects on children. Many children experience few or no psychiatric difficulties immediately following abuse, and there is no distinctive collection of symptoms associated with CSA. However, some victims experience problems that continue into adulthood. For example, the lifetime prevalence of depression is three to five times more common in women with a history of CSA compared to those who have not experienced CSA (Putnam, 2003). Sexually abused children exhibit symptoms of post-traumatic stress disorder (PTSD) and sexualized behavior more often than non-abused children (Kendall-Tackett, Williams, & Finkelhor, 1993). Other problematic outcomes include externalizing behaviors such as conduct problems, aggressive behaviors, and self-harm behaviors (Paolucci, Genuis, & Violato, 2001). Various internalizing symptoms associated with CSA include depression, anxiety, and low self-esteem (Kendall-Tackett et al., 1993; Paolucci et al., 2001). In later adulthood, both male and female victims of CSA are more likely to have alcohol problems, use illicit drugs, attempt suicide, or have marriage or family problems (Dube, Anda, Whitfield, Brown, Felitti, Dong, & Giles, 2005).

Currently, there is no model for predicting which children will experience psychiatric problems or revictimization following abuse or when difficulties are most likely to occur. The heterogeneity of the victim population causes some difficulty in examining whether the outcomes of treatment are a result of abuse or other life events; CSA is found across all ethnicities, age levels, socioeconomic groups, settings, and family types (Yancey & Hansen, 2010). It has been advocated that victims of CSA be treated as a heterogeneous group, with treatment targets tailored to individual symptom presentations (Yancey, 2010).

Despite diverse service needs, psychological treatment can be extremely beneficial for children who have experienced CSA. A recent meta-analysis of research examining outcomes for sexually abused children demonstrated that psychological treatment can be helpful in decreas-

ing psychiatric symptoms associated with abuse (Harvey & Taylor, 2010). Further, Yancey and Hansen (2010) report that cognitive-behavioral, psychoeducational interventions for child victims and their non-offending caregivers can result in fewer PTSD symptoms, internalizing and externalizing symptoms, and sexualized behaviors, as well as increased caregiver support. In cases where children exhibit subclinical or are absent of difficulties, risk may exist for developing what researchers have called a "sleeper effect," in which symptoms emerge following a period of undetected impairment (Saywitz, Mannarino, Berliner, & Cohen, 2000).

For "sleeper effect" children, treatment may help prevent symptoms. Furthermore, even in cases where children are not affected by abuse in measurable ways, treatment can prevent re-victimization, promote healthy coping, and educate parents (Putnam, 2003). One study showed that victims involved in treatment were revictimized by their perpetrators at a rate of 7%, compared to 20% of non-participating victims (Bagely & LaChance, 2000). The victims participating in treatment were victimized at a rate of 4% by another perpetrator compared to 33% of victims not enrolled in a treatment program. The Bagely and LaChance study is very unique in that it is both time and resource intensive, lasting many years, so the results could not be compared to other findings regarding revictimization.

Although research has shown that treatment is beneficial following CSA, attending regularly scheduled sessions at an outpatient facility presents challenges for many families. Families often have a wide variety of needs for services (e.g., from law enforcement and the justice system) following abuse, so psychological treatment may not always be seen as a priority (Kolko, Seleyo, & Brown, 1999). Furthermore, abuse can be a very stressful experience for caregivers, which may decrease their ability to organize and plan for treatment attendance. While many have cited "family functioning" as a possible factor associated with treatment retention, this broad concept currently requires further examination in the literature (Horowitz, Putnam, Noll, & Trickett, 1997). More generally, while providers recognize that retaining families is a frequent barrier to providing helpful CSA treatment, factors that affect service usage by families that experience abuse have received little attention in the literature.

There are several missing links in the literature regarding participation and retention of clients seeking treatment. Most articles do not address factors related to participation and retention. The study focused primarily on the factors that impact participation and retention among children who have been sexually abused and are in a group treatment program. Specifically, the data will be collected from past client files from Project SAFE (Sexual Abuse Family Education), a clinical research endeavor of

the Child Maltreatment Lab at the University of Nebraska–Lincoln. This program provides group treatment for children who have experienced child sexual abuse and their non-offending caregivers. Focuses of our research include various self-report measures of family functioning, behavioral indexes completed by both the parents and the children, and demographic information reported prior to treatment.

It was hypothesized that demographic variables reflective of higher levels of family resources (e.g., income level and parental education) would be positively related to participation and retention. No research was found regarding the relationship between characteristics of abuse that children experience, participation, and retention. As the literature does not provide enough evidence for specifying a hypothesis, this will be an exploratory analysis. Lastly, it was hypothesized that higher levels of parental stress and mental health difficulties would be negatively related to participation and retention, whereas higher levels of family functioning (e.g., adaptability and cohesion) will be positively correlated to participation and retention.

Many families referred to Project SAFE stop attending treatment before the sessions have been completed or miss sessions throughout the course of treatment. The primary objective of this project was to understand what leads to differences in retention and participation for families. Information on factors that promote retention and steady participation will provide a background for clinicians who attempt to identify and ameliorate difficulties that may lead families to either attend inconsistently or discontinue treatment.

Method

Participants

Participants were 175 children and adolescents and 175 of their non-offending primary caregivers. Families sought cognitive-behavioral group treatment at an outpatient clinic following the participating child's disclosure of CSA. In cases where two caregivers participated in treatment, measures were collected from the self-identified primary caregiver. Families were referred from appropriate community agencies to Project SAFE and by brochures mailed to the families regarding treatment. Community agencies included a Child Advocacy Center (CAC) in Nebraska, Nebraska Department of Health and Human Services, and professionals who treated children and adolescents who have disclosed occurrence of sexual abuse.

Assessment

Participating children ranged in age from 4.58 to 18.58 years with a mean age of 11.61 years ($SD=3.00$). Of the sample, 144 (82.3%) were female, and the remaining 31 participants (17.7%) were male. Regarding ethnic identity, 140 (80%) of participating children were Caucasian, 9 (5.1%) were Latino/a, 9 (5.1%) were African-American, 2 (1.1%) were Native-American, 8 (4.6%) were biracial, and 4 (2.3%) were multiracial.

Non-offending primary caregivers in this sample had a mean age of 37.34 ($SD = 7.153$) with an age range of 23-64. Biological mothers constituted 75.9% of the sample ($N = 132$), and 13.0% of the participants ($N = 23$) were biological fathers. The caregivers who made up the remaining 11.1% and totaled 14 people, included: step-mothers and fathers, adoptive parents, foster parents, aunts, uncles, grandmothers, and step-grandfathers. Concerning the highest level of education attained by the caregivers, 12 (6.9%) caregivers had not graduated from high school, 74 (42.3%) had high school diplomas, 36 (20.6%) had completed some college, 15 (8.6%) had an Associate's degree, 17 (9.7%) had a bachelor's degree, 4 (2.3%) had a master's degree, and 16 (9.1%) did not report their education level. The majority of caregivers were Caucasian (84.6%) while 1.1% were African-American, 6.9% were Latino/a, 2.9% were biracial, 1 (.6%) was Native American and 1 (.6%) identified as multiracial. Regarding marital status, 69 (39.4%) of participating caregivers were married, 54 (30.9%) were divorced, 27 (15.4%) were separated, 8 (4.6%) were never married but living with someone, 4 (2.3%) were never married and not living with someone, 1 (.6%) was widowed, and 12 caregivers' (6.9%) marital status was unknown. Of the caregivers, 71.4% were currently employed. Caregivers were distributed across annual income brackets as follows: \$15,000 or less (26.9%), \$15,001 to \$25,000 (13.7%), \$25,001 to \$40,000 (23.4%), \$40,001 to \$60,000 (12.6%), \$60,001 to \$100,000 (10.9%), more than \$100,000 (3.4%), and unknown (9.1%).

Families who participated in Project SAFE were selected using the following criteria: (a) the child was between seven and 16 years of age, (b) the non-offending caregiver assumed a care giving role within the family (e.g., step-parent, foster parent, grandparent), and (c) the sexual abuse allegation was investigated by protective services. There were no restrictions applied to the relationship between the victim and alleged perpetrator (e.g., interfamilial or extrafamilial) or to the gender of the victim, non-offending caregiver, or perpetrator. The only criterion that caused clients to be excluded was significant impairment in cognitive and/or intellectual functioning of the child or caregiver.

Measures

Adult participants in this study completed the following instruments (listed in alphabetical order):

Child History Form (CHF). This unstructured interview collects relevant abuse-related information. A Project SAFE staff member conducts the interview, and caregivers provide information about the abuse in their own words. Collected information regarding the abuse included age of onset and end of abuse, victim/perpetrator relationship, duration and frequency of abuse, and intrusiveness of the abuse (i.e., whether penetration occurred).

Demographic Questionnaire. Project SAFE collected general demographic information about family members. Information that was collected includes caregiver marital status, family income, ethnic background, employment status, age, and highest degree achieved. Information gathered about the child includes current grade, current school, ethnic background, and age.

Family Adaptability and Cohesion Evaluation Scales (FACES-III; Olson, 1986). This 20-item measure was used to assess family adaptability, cohesion, and satisfaction. The measure was administered twice, with the intent of comparing current family adaptability, cohesion, and satisfaction to ideal family adaptability, cohesion, and satisfaction. The measure is used to assess perceptions of current and ideal family systems using a 5-point scale. The FACES-III has fair internal consistency with alphas ranging from .62 to .77 and good face validity (Olson, 1986). Higher cohesion scores indicate higher family enmeshment, higher adaptability scores are said to indicate higher family chaos, and higher family satisfaction scores are said to indicate higher stratification with family functioning.

Family Crisis Oriented Personal Evaluation Scales (F-COPES; McCubbin, Olson, & Larsen, 1987). This 30-item measure is used to assess effective problem-solving coping attitudes and behavior used by families in response to problems or difficulties. Two elements of family interactions are measured: internal family strategies (resources) and external family strategies (behaviors used to acquire resources outside of the family). F-COPES has an internal consistency of .86, and shows good factorial validity and concurrent validity with other measures of family functioning (McCubbin, et. al, 1987).

Parenting Stress Index (PSI; Abidin, 1995). This checklist is used to assess the degree of stress caregivers are experiencing regarding their current role in childcare; Project SAFE uses a 20 item subset of the full PSI originally developed by Abidin (1986). The PSI is not a child diagnostic

scale; it is used to evaluate the relationship between the caregiver and the child.

Symptom Checklist-90 Revised (SCL-90-R). This 90-item self-report measure is used to assess caregiver mental health symptoms. The SCL-90-R has been shown to have adequate internal consistency, test-retest reliability, generalizability across populations, and concurrent validity (Derogatis, 1983).

Procedures

Data for the current study came from an ongoing clinical treatment program (Project SAFE), and the procedures described below reflect those of this program.

Families interested in Project SAFE treatment groups were contacted by the project coordinator and screened based on the criteria for intervention. Potential participants were informed that, along with their involvement in the Project SAFE groups, they would need to complete questionnaires to assist the therapists in understanding each family's current functioning and response to treatment. The questionnaires aided therapists in serving other families experiencing comparable problems. Caregivers gave informed consent for their own and their child's participation. Youth also provided approval to participate in the study. The informed consent and approval procedures described the group intervention and research goals of the project. Children and caregivers completed their assessment measures separately. Payments of \$20 were made to each family after the pretreatment assessment measures were completed.

Caregivers and children participating in Project SAFE completed an assessment packet prior to treatment, midway through treatment, at treatment completion, and three months following treatment (described in other research describing and evaluating the clinical and research endeavor; e.g., Campbell, Wilson, Evans, Sawyer, Tavkar, & Hansen, 2006; Hsu, 2003; Sawyer, Tsao, Hansen, & Flood, 2006). For the analyses in the current study, only pretreatment data from the measures completed by caregivers and described above were utilized. These data were purposefully selected for use in analyses relevant to the aims of the current study. Graduate students assisted caregivers with questions during completion of self-report measures. Children and caregiver groups at Project SAFE met simultaneously once per week for twelve weeks for 90-minute sessions. Sessions were conducted at the Psychological Consultation Center of the Department of Psychology at University of Nebraska-Lincoln (UNL) and the local Child Advocacy Center. Doctoral students in the clinical psychology program at UNL cofacilitated the groups.

Results were entered into a database through the software program Statistical Package for the Social Sciences (SPSS). Using this program, between groups analyses of variance (ANOVAs) were used, along with Pearson's correlations and chi-squares.

Results

Variables representing participation and retention were examined separately in the current investigation. Participation was classified as the total number of sessions each child or adolescent attended. Retention was examined as a binary variable, which allowed for comparison between families who attended eight or more sessions (i.e., families who participated in at least 2/3 of treatment) and those who attended seven or fewer sessions.

Demographic Variables

Demographic variables examined were caregiver age, caregiver level of education, marital status, income, child age, and gender. Pearson's correlation between caregiver age ($M = 37.34$, $SD = 7.153$) and participation ($M = 7.98$, $SD = 3.81$) was $r(166) = .23$, $p = .003$. This result indicates that as caregivers increase in age, their children are more likely to attend more sessions. Those caregivers whose children attended between 0 and 7 sessions had a mean age of 35.20 ($SD = 6.27$), whereas those caregivers whose children attended between 8 and 12 sessions had a mean age of 38.41 ($SD = 7.35$). Similar to results relating to the relationship between caregiver age and participation, retention was more likely among older caregivers and their children, $F(1, 166) = 7.85$, $p = .006$, $Mse = 49.16$.

Regarding caregiver's level of education, the mean years of education completed was 3.81 years (some college completed) ($SD = 1.35$) and participation ($M = 7.98$, $SD = 3.81$). Pearson's correlation was used to compare caregiver level of education and participation and showed $r(157) = .200$, $p = .011$. As level of education increases, children are more likely to participate in more sessions. Those caregivers who attended between 0 and 7 sessions had a mean grade completion of 3.48 ($S = 1.18$), meaning that on average, they had obtained a high school diploma. Caregivers whose children attended 8 and 12 sessions had a mean of 3.95 ($S = 1.40$), meaning that, on average, they had completed some college. Retention was also more likely among caregivers with higher levels of education, $F(1, 157) = 4.30$, $p = .04$, $Mse = 1.79$.

Caregivers who were married and not currently separated had their children attend an average of 9.00 sessions ($SD = 3.71$). Those caregiv-

Table 1. Number of Sessions Attended for Children Endorsing Various Indicators of Abuse Severity

Indicator of Severity	Mean	(Standard Deviation)
Intrafamilial	7.91	(3.80)
Involved penetration	8.12	(3.72)
Duration > 1 month	8.07	(3.74)
Frequency > 1 time	8.37	(3.69)
Extrafamilial	8.12	(3.79)
Did not involve penetration	7.96	(3.94)
Duration < 1 month	7.04	(4.11)
Frequency = 1 time	7.44	(3.89)

ers who were married and currently separated, widowed, divorced, never married and living with someone or never married and not living with someone had their children attend an average of 7.14 sessions ($SD = 3.88$). Families of caregivers who were married and not separated participated in a greater number of sessions than those who were not married or married and currently separated, $F(1, 161) = 9.50, p = .002, Mse = 14.52$. Further, retention was also more likely among families with caregivers who were currently married, $\chi^2(2) = 7.01, p = .01$.

Income ($M = 2.75$, i.e., less than \$25,000, $SD = 1.5$) and participation ($M = 7.98, SD = 3.81$) had a Pearson's correlation of $r(157) = .291, p < .001$, which indicates a positive relationship between caregiver income and family participation in treatment. Caregivers in families that attended between 0 and 7 sessions have a mean income of 2.25 ($SD = 1.34$, approximately \$25,000) compared to caregivers who had their children attend between 8 and 12 sessions, who have a mean income of 2.99 ($SD = 1.51$, approximately \$40,000). These results indicate that retention was more likely for families with caregivers with higher incomes, $F(1, 157) = 4.30, p = .04, Mse = 1.80$.

Pearson's correlation between child's age ($M = 139.31$ months, $SD = 3.81$) and participation ($M = 7.98, SD = 3.81$) was $r(173) = -.02, p = .827$. Child age was not related to family participation in treatment. Children who attended between 0 and 7 sessions had a mean age of 138.51 months (approximately 11.54 years, $SD = 36.91$ months); those children who attended between 8 and 12 sessions had a mean age of 139.69 months (approximately 11.64 years) ($SD = 35.71$ months). This result shows that the age of the child attending treatment does not impact retention, $F(1, 173) = .04, p = .84, Mse = 1303.48$.

The sample of participants was unequally distributed across gender, with far more female participants than male. Males had a mean attendance of 6.9 sessions ($SD = 3.52$), while females had a mean attendance of 8.21 sessions ($SD = 3.85$). The relationship between gender and participation was not significant, $F(1, 173) = 3.02, p = .08, Mse = 14.38$. There is a relationship between gender and retention in the sample, $\chi^2(2) = 6.22, p = .013$. This result may be influenced by the fact that there were only 31 males and 144 females in this study.

Abuse Characteristics

For our second question regarding the relationship between both the characteristics of abuse and participation and characteristics of abuse and retention, we examined four variables related to abuse severity. The variables examined whether the abuse was intrafamilial or extrafamilial, whether the abuse involved penetration, whether the duration was longer than one month, and whether the frequency was more than one time.

Those children who reported intrafamilial abuse (i.e., abuse by a biological parent, step-parent, adoptive parent, foster parent, grandparent, sibling or other family member) had a mean participation of 7.91 sessions ($SD = 3.8$). Children who experienced abuse from an extrafamilial person (i.e., parent's boyfriend or girlfriend, adult family friend, child family friend, babysitter, teacher/coach, neighbor, stranger, peers) had a mean participation of 8.12 sessions ($SD = 3.79$). There is no significant relationship between the relationship between the perpetrator and the participation the child had in treatment, $F(1, 164) = .12, p = .73, Mse = 14.4$. There is no relationship between the child's relationship to the perpetrator and retention $\chi^2(2) = .12, p = .73$.

Children who experienced penetration (vaginal, anal, oral or digital) had a mean participation of 8.12 sessions ($SD = 3.72$), whereas those who did not experience penetration (i.e., experienced fondling, exposure, pornography or performed act on another child) had a mean participation of 7.96 sessions ($SD = 3.94$). There is no relationship between type of abuse reported and participation, $F(1, 160) = .70, p = .79, Mse = 14.52$. There is no relationship between the type of abuse and the retention, $\chi^2(2) = .10, p = .76$.

Those children who experienced abuse for one month or less had a mean participation of 7.04 sessions ($SD = 4.11$), whereas those who had a duration longer than one month attended an average of 8.07 sessions ($SD = 3.74$). There was no significant relationship between the duration of the abuse and the number of sessions that were attended, $F(1, 141) = .83, p = .44, Mse = 14.9$. There was no significant relationship between the duration of abuse and retention, $\chi^2(2) = 3.33, p = .19$.

Table 2. Percent of Families Attending at Least 8 of 12 Sessions across Various Abuse Severity Indicators

Indicator of Abuse	Percent attended between 8 and 12 sessions
Intrafamilial	66
Involved penetration	69
Duration > 1 month	70
Frequency > 1 time	74
Extrafamilial	69
Did not involve penetration	67
Duration < 1 month	52
Frequency = 1 time	58

Children who experienced abuse one time only had a mean participation of 7.44 sessions ($SD = 3.89$) compared to those who experienced abuse more than one time, who had a mean participation of 8.37 sessions ($SD = 3.69$). There was not a significant relationship between frequency of abuse and participation, $F(1, 172) = 1.45, p = .24, Mse = 14.48$. There was no significant relationship between frequency of abuse and retention, $\chi^2(2) = 4.65, p = .10$.

Parent and Family Functioning

Three variables were examined for the questions regarding parent and family functioning. Concerning parent functioning, scores from the SCL-90-R were examined: the Global Severity Index, the Positive Symptom Total, and the Positive Symptom Distress Index. Measures that were examined regarding family functioning were the Cohesion Now and Adaptability Now scales from the FACES-III and the F-COPES Total Score.

Regarding parent functioning, Pearson's correlation between the Global Severity Index ($M = 43.92, SD = 11.62$) and participation ($M = 7.98, SD = 3.81$) was $r(158) = -.106, p = .181$. The Global Severity Index is designed to measure overall psychological distress. Higher measures indicate more distress among caregivers. There was no relationship between the Global Severity Index and the total number of sessions attended by the child. Regarding retention, those caregivers who had their children attend between 0 and 7 sessions had a mean T -score of 45.90 ($SD = 13.81$) on the Global Severity Index, whereas those whose children attend 8 and 12 sessions had a T -score of 42.99 ($SD = 10.38$). There was not a signifi-

Table 3. Relationship of Parent and Family Functioning to Participation

Measure of Parent/Family Functioning	Mean score (SD)	Pearson's correlation	
		<i>r</i>	<i>p</i>
Global Severity Index SCL-90-R	43.92 (11.62)	-.106	.181
Positive Symptom Total SCL-90-R	45.73 (11.79)	-.073	.360
Positive Symptom Distress Index SCL-90-R	43.51 (11.05)	-.166	.036*
Cohesion Now FACES-III	36.71 (6.87)	.093	.238
Adaptability Now FACES-III	24.26 (4.65)	-.073	.351
F-COPES Total	102.30 (14.24)	.190	.015*

* $p < .05$

cant relationship between the Global Severity Index and retention, $F(1, 158) = 2.20, p = .140, Mse = 134.02$.

Pearson's correlation between the Positive Symptom Total ($M = 45.73, SD = 11.79$) and participation ($M = 7.98, SD = 3.81$) was $r(157) = -.073, p = .360$. The Positive Symptom Total is the number of self-reported symptoms. Higher scores on this measure indicate more distress among caregivers. With regards to retention, those caregivers whose children attended between 0 and 7 sessions had an average T -score on the Positive Symptom Total of 47.22 ($SD = 13.50$), while those who attended between 8 and 12 sessions had an average T -score of 45.03 ($SD = 10.89$). There was no significant relationship between the Positive Symptom Total and retention $F(1, 157) = 1.19, p = .28, Mse = 138.93$.

The final measure of parental mental health functioning examined was the Positive Symptom Distress Index, which is designed to measure the intensity of symptoms. Higher scores on this measure indicate more distress in the caregiver. Pearson's correlation was used and the relationship between the Positive Symptom Distress Index ($M = 43.51, SD = 11.05$) and participation ($M = 7.98, SD = 3.81$) was $r(158) = -.166, p = .036$. There was a negative relationship between intensity of parental mental health symptoms and participation. For retention, those caregivers whose children attend between 0 and 7 sessions had a Positive Symptom Distress Index T -score average of 46.16 ($SD = 13.13$), whereas those who had attended between 8 and 12 sessions had an average T -score of 42.28 ($SD = 9.75$). Retention was more likely among families with caregivers with lower reported intensity of mental health symptoms, $F(1, 158) = 4.38, p = .04, Mse = 119.52$.

The Cohesion Now Scale of the FACES-III measures the degree of separation or connection of family members to the family unit. Higher scores on this scale indicate higher cohesion and enmeshing among

Table 4. Comparison of Parent and Family Functioning Measures and Retention

Measure of Parent/Family Functioning	Attendance		ANOVA	
	0 - 7 sessions (SD)	8 - 12 sessions (SD)	F	p
Global Severity Index	45.90 (13.81)	42.99 (10.38)	158, 2.20	.140
Positive Symptom Total	47.22 (13.50)	45.03 (10.89)	157, 1.19	.276
Positive Symptom Distress Index	46.16 (13.13)	42.28 (9.75)	158, 4.38	.038*
Cohesion Now	35.38 (8.41)	37.35 (5.95)	162, 2.99	.086
Adaptability Now	24.51 (5.07)	24.14 (4.46)	162, .231	.631
F-COPES Total	98.21 (15.96)	104.22 (13.00)	161, 6.51	.012*

* $p < .05$

families. Pearson's correlation between the Cohesion Now ($M = 36.71$, $SD = 6.87$) and participation ($M = 7.98$, $SD = 3.81$) was $r(162) = .09$, $p = .238$. This result indicates no relationship between family functioning and participation. For retention, caregivers whose children attended between 0 and 7 sessions had a mean score on the Cohesion Now of 35.38 ($SD = 8.41$), while those who attended between 8 and 12 sessions had a mean score of 37.35 ($SD = 5.95$). This result does not show a significant difference between Cohesion Now scores and retention, $F(1, 162) = 2.99$, $p = .09$, $Mse = 46.73$.

Another aspect of family functioning measured was the Adaptability Now scale of the FACES-III. This measure examines the amount of chaos in a family. Higher scores indicate more chaos among the family. Pearson's correlation between Adaptability Now scores ($M = 24.26$, $SD = 4.65$) and participation ($M = 7.98$, $SD = 3.81$) was $r(162) = -.07$, $p = .351$, indicating no relationship between scores on this measure and participation. For retention, those caregivers who had their children attend between 0 and 7 sessions had a mean score on the Adaptability Now of 24.51 ($SD = 5.07$); those who attended between 8 and 12 sessions had a mean score of 24.14 ($SD = 4.46$). This measure of family functioning did not predict higher retention among families, $F(1, 162) = .23$, $p = .63$, $Mse = 21.74$.

The final measure regarding family functioning is the F-COPES Total score, which measures the family's coping abilities (i.e., acquiring social support, mobilizing family to receive help, etc.). Higher scores indicate a better ability to utilize coping skills in a family. Pearson's correlation was used, and the relationship between F-COPES Total ($M = 102.30$, $SD = 14.24$) and participation ($M = 7.98$, $SD = 3.81$) was $r(161) = .19$, $p = .015$. This result indicates that higher levels of family functioning, as measured by the F-COPES, relate to higher numbers of sessions attended by the family. With regards to retention, those caregivers whose children attended between 0 and 7 sessions had a mean score of 98.21 ($SD = 15.96$) on the F-COPES Total, while those children who attended between 8 and 12 sessions had a mean score of 104.22 ($SD = 13.00$). As hypothesized, retention was more likely among families with higher F-COPES scores, $F(1, 161) = 6.51$, $p = .01$, $Mse = 196.17$.

Discussion

The current study explored variables useful in predicting participation and retention among families seeking treatment following CSA. Bivariate analyses were used to examine demographic variables, abuse characteristics, parent functioning, and family functioning and their influence

on participation and retention. Regarding demographics, caregiver age, educational attainment, and income level were positively related to treatment participation and retention. Further, married caregivers also had higher levels of participation and retention. Having a female child participating in treatment was also associated with increased participation and retention, but those results may be misleading, as there were far more female participants than males. Overall, results related to demographic characteristics were consistent with this study's hypotheses that variables reflective of higher levels of resources, such as income and parental education, would be related to higher participation and retention.

Also examined were characteristics of abuse that the child had experienced. Among the variables reflecting abuse severity examined in the study, none significantly affected participation or retention. The perpetrator's relationship to the victim (i.e., intrafamilial or extrafamilial), whether penetration occurred, duration, and frequency of the abuse had no relationship with treatment participation or retention. This was an exploratory analysis, given the lack of information in the current literature on the relationship between abuse severity and treatment-seeking behavior. While more research is needed in this area, results indicate that abuse severity may be less helpful than other information in predicting family's treatment seeking behavior following CSA.

Lastly, parent functioning and familial functioning were examined. We hypothesized that higher levels of parental stress and mental health difficulties would be negatively related to participation and retention. Further, it was hypothesized that higher levels of family functioning will be positively related to participation and retention. Examination of the Positive Symptom Distress Index from the SCL-90-R, which measures intensity of psychological symptoms, and the F-COPES Total, which measures the family's coping abilities, yielded significant results. Measures concerning parent functioning: the Global Severity Index from SCL-90-R, designed to measure the overall psychological distress, and the Positive Symptom Total also from the SCL-90-R, the number of self-reported symptoms, did not yield significant results. Measures concerning family functioning—the Cohesion Now from the FACES-III, which measures the degree of separation or connection of family members to the family unit, and Adaptability Now, also from the FACES-III, which measures the amount of chaos in a family, did yield significant results.

Exploration of these results led to several suggestions for increasing participation and retention among families seeking treatment following CSA. Perhaps the most consistent finding within the variables examined was the positive relationship between family's resources (e.g., income, education, marital status of the primary caregiver) and treatment

attendance. The stressors associated with low socio-economic status create many barriers to treatment attendance including transportation issues, difficulty keeping in contact with the agency providing treatment (e.g., no access to a telephone), lack of time availability, and scheduling conflicts. Caregivers who are married have another person to help with caring for other children in the family during sessions, assist with transportation, and provide extra income. Caregivers may experience low motivation to seek treatment on their own. Many programs are designed to prevent psychiatric symptoms after abuse has occurred. Because children have not yet exhibited psychiatric symptoms, caregivers may assume children do not require treatment and therefore have lower motivation to attend treatment (Nix, Bierman & McMahon, 2008).

When families present for treatment indicate that they have difficulties accessing resources that make attending treatment possible, clinicians may be able to make efforts to reduce some barriers. Appel, Ellison, Jansky and Oldak (2004) suggested programs could assist families who were at risk for dropping out; by providing funding of transportation for clients, and increasing the resources available for treatment programs, programs could better serve their clients. For example, if transportation is an issue, the treatment facility can give the caregiver gas cards with the agreement that every session possible will be attended. If the caregiver does not have a vehicle, a group treatment facility with funding could give bus passes to those attending treatment with the agreement that they will be returned at the end of treatment. On-site childcare for siblings not participating in treatment, similar to those services Project SAFE provides, may reduce barriers (e.g., lack of childcare) to treatment attendance for many families.

No significant relationships concerning the various abuse characteristics examined and participation and retention were found. This analysis was exploratory because of a lack of prior research regarding this topic area. While more research is needed, the results from this study suggest that there is little relationship between abuse severity, treatment participation, and retention. This result supports previous research that CSA treatment inclusion guidelines not be limited to presentations of certain disorders (e.g., PTSD). Some research on the relationship between abuse severity and psychiatric diagnoses following CSA suggests that more severe abuse is related to greater likelihood of psychiatric diagnosis. More severely abused children may present with overreaction to low-level threats and could fail to react appropriately to a signal of risk or threat for assault (Cloitre & Rosenberg, 2006). However, results from the current investigation suggest that a family's interest in treatment is not dependent on the severity of the abuse.

Mixed results emerged regarding parent and family functioning. While some measures did not relate to participation or retention, a relationship was found between the Positive Symptom Distress Index from the SCL-90-R and the F-COPES Total Score (which measure the intensity of psychological symptoms experienced by the caregiver and the family's coping abilities, respectively). The Positive Symptom Distress Index was negatively related to participation and retention, meaning that families with caregivers who reported lower intensity of symptoms attended more sessions of treatment and were more likely to participate in at least two-thirds of treatment sessions. The F-COPES Total Score was positively related to participation and retention. In families where caregivers reported higher coping abilities, the likelihood of families remaining in treatment was greater. These results suggest that, for at least some families, caregiver psychological distress and family functioning can negatively impact ability to consistently attend treatment. These results are consistent with outcomes from other investigations examining treatment attendance among families, suggesting that extremely chaotic and dysfunctional families are less able to provide means for children to attend treatment or feel emotionally stable (Masselam, Marcus, & Stunkard, 1990). Results suggest that for some families, referrals to additional services (delivered either prior to treatment or concurrently), may be necessary to reduce a broad range of interferences to attending treatment focused specifically on difficulties associated with CSA.

Some limitations to the current investigation existed. The sample was largely female and Caucasian, limiting ability to generalize results to male victims and ethnically diverse families who have experienced CSA. This study was conducted in a university-based setting, capable of providing free services; therefore, results may not generalize to fee-for-service settings. There should be replications of this study not only in fee-for service settings, but also other Child Advocacy Centers. There was also a limited measure of caregiver mental health, as only the SCL-90-R was used. Finally, barriers to treatment perceived by the family were not directly measured in this study. In future research, some of the obstacles encountered in this study can be eliminated with a larger sample of male victims and having the study be duplicated in other environments. Also, having a measure regarding barriers to treatment attendance as reported by the families would be beneficial for showing any difficulties that the families would perceive as barriers to their treatment attendance unbeknownst to the clinicians.

This study identified important variables that affect participation and retention among families attending group treatment following disclosure of CSA. While there are variables beyond the control of families seeking

treatment, results also suggested multiple avenues through which clinicians may help reduce barriers to treatment attendance. Identification of these variables early in the treatment process can help clinicians preemptively implement efforts to reduce barriers. Results from the current investigation therefore have clinical implications for increasing a family's abilities to receive helpful treatment following disclosure of CSA.

References

- Abidin, R. R. (1986). *Parenting Stress Index – Manual* (Second Edition). Charlottesville, VA: Pediatric Psychology Press.
- Appel, P.W., Ellison, A.A., Jansky, H.K., & Oldak, R. (2004). Barriers to enrollment in drug abuse treatment and suggestions for reducing them: Opinions of drug injecting street outreach clients and other system stakeholders. *The American Journal of Drug and Alcohol Abuse*, 30(1), 129-153.
- Arata, C. M. (2000). From child victim to adult victim: A model for predicting sexual revictimization. *Child Maltreatment*, 5, 28-38.
- Bagley, C., & LaChance, M. (2000). Evaluation of a family-based programme for the treatment of child sexual abuse. *Child and Family Social Work*, 5, 205-213.
- Blumberg, E., Landsverk, J., Ellis-Macleod, E., Ganger, W., & Culver, S. (1996). Use of the public mental health system by children in foster care: Client characteristics and service use patterns. *Journal of Mental Health Administration*, 23, 389-405.
- Campbell, C., Veed, G.J., Martin, E.K., & Hansen, D.J. (2008, November). *Heterogeneity of emotional and behavioral symptom presentation in sexually abused youth: The influence of parental characteristics on outcomes*. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.
- Campbell, C., Wilson, K., Evans, S., Sawyer, G. K., Tavkar, P., & Hansen, D. J. (2006, November). *Heterogeneity of psychological and behavior symptom presentation in sexually abuse youth: Three months post treatment*. Poster presented at the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- Celano, M., Hazzard, A., Webb, C., & McCall, C. (1996). Treatment of traumatic beliefs among sexually abused girls and their mothers: An evaluation study. *Journal of Abnormal Child Psychology*, 24, 1-16.
- Classen, C. C., Palesh, G., & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, and Abuse*, 6, 103-129.
- Cloitre, M. & Rosenberg, A. (2006). Sexual revictimization: Risk factors and prevention. In V. M. Follette & J. I. Ruzek (Eds.), *Cognitive-behavioral therapies for trauma* (pp. 321-361). New York: Guilford.
- Dube, S., Anda, R., Whitfield, C., Brown, D., Felitti, V., Dong, M., & Giles, W. (2005). Long- term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventative Medicine*, 28(5), 430-438.

- Fergusson, D., Lynskey M., & Horwood, L. (1996). Childhood sexual abuse and psychiatric disorder in young adulthood, I: Prevalence of sexual abuse and factors associated with sexual abuse. *Journal of the American Academy of Child Adolescent Psychiatry*, 35, 1355-1364.
- Finkelhor, D. (1993). Epidemiological factors in the clinical identification of child sexual abuse. *Child Abuse and Neglect*, 17, 67-70.
- Futa, K. T., Hecht, D. B., Sawyer, G. K., & Hansen, D. J. (2004). *Manual for the Weekly Problems Scales: Parent and child versions*. Lincoln: University of Nebraska-Lincoln Department of Psychology.
- Goldman, J. D. G., & Padayachi, U. K. (2000). Some methodological problems in estimating incidence and prevalence in child sexual abuse research. *Journal of Sex Research*, 37, 305-315.
- Haugaard, J. J. (2000). The challenge of defining child sexual abuse. *American Psychologist*, 55, 1036-1039.
- Horowitz, L.A., Putnam, F.W., & Noll, J.G. (1997). Factors affecting utilization of treatment services by sexually abused girls. *Child Abuse and Neglect*, 21, 35-48.
- Humphrey, J.A. & White, J.W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, 27, 419-424.
- Humphreys, C. (1995). Whatever happened on the way to counseling? *Child Abuse & Neglect*, 19, 801-810.
- Hsu, E. (2003). Parallel group treatment for sexually abused children and their nonoffending parents: An examination of treatment integrity and child and family outcome and satisfaction. Unpublished doctoral dissertation, University of Nebraska, Lincoln.
- 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.
- Kolko, D.J., Seleyo, J., & Brown, E.J. (1999). The treatment histories and service involvement of physically and sexually abusive families: Description, correspondence and clinical correlates. *Child Abuse and Neglect*, 23, 459-476.
- Lalor, K., & McElvaney, R. (2010). Child sexual abuse, links to later sexual exploitation/high risk sexual behavior and prevention/treatment programs. *Trauma, Violence and Abuse*, 11, 159-177.
- Masselam, V. S., Marcus, R. F., & Stunkard, C. L. (1990). Parent-adolescent communication, family functioning, and school performance. *Adolescence*, 25, 725-737.
- McCubbin, H. I., Olson, D. H., & Larsen, A. S. (1987). F-COPES: Family Crisis Oriented Personal Evaluation Scales. In H. I. McCubbin & A. I. Thompson (Eds.), *Family assessment inventories for research and practice* (pp. 259-270). Madison: University of Wisconsin.
- McGee, H., Garavan, R., de Barra, M., Byrne, J., & Conroy, R. (2002). The SAVI Report: Sexual abuse and violence in Ireland. A national study of Irish experiences, beliefs and attitudes concerning sexual violence. Dublin: The Liffey Press & Dublin Rape Crisis Centre.

- Messman-Moore, T., & Long, P. (2003). The role of childhood sexual abuse sequelae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Psychology Review, 23*, 537-571.
- Mullen, P., Martin, J., Anderson, J., Romans, S., & Herbison, G. (1993). Childhood sexual abuse and mental health in adult life. *British Journal of Psychiatry, 16*, 721-732.
- Nishith, P., Mechanic, M. B., & Resick, P. A. (2000). Prior interpersonal trauma: The contribution to current PTSD symptoms in female rape victims. *Journal of Abnormal Psychology, 109*, 20-25.
- Nix, R. L., Bierman, K. L., & McMahon, R. J. (2009). How attendance and quality of participation affect treatment response to parent management training. *Journal of Consulting and Clinical Psychology, 77*(3), 429-438. doi:10.1037/a0015028
- Paolucci, E. O., Genuis, M. L., & Violato, C. (2001). A meta-analysis of the published research on the effects of child sexual abuse. *Journal of Psychology, 1135*, 17-37.
- Pereda, N., Guilera, G., Forns, M., & Gomez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse and Neglect, 33*, 331-342.
- Olson, D. H. (1986). Circumplex Model VII: Validation studies and FACES-III. *Family Process, 25*, 337-350.
- Russell, D. (1986). *The secret trauma: Incest in the lives of girls and women*. New York: Basic Books.
- Sawyer, G. K., Tsao, E. G., Hansen, D. J., & Flood, M. F. (2006). Weekly problems scales: Instruments for sexually abused youth and their nonoffending parents in treatment. *Child Maltreatment, 11*, 34-48.
- Saywitz, K.J., Mannarino, A.P., Berliner, L., & Cohen, J.A. (2000). Treatment for Sexually Abused Children and Adolescents. *American Psychologist, 55*, 1040-1049.
- Schumm, J. A., Hobfoll, S. E., & Keogh, N. J. (2004). Revictimization and interpersonal resource loss predicts PTSD among women in substance-use treatment. *Journal of Traumatic Stress, 17*, 173-181.
- Stevenson, J. (1999). The treatment of the long-term sequelae of child abuse. *Journal of Child Psychology and Psychiatry, 40*, 89-111.
- Trask, E. V., Walsh, K., & DiLillo, D. (2010). Treatment effects for common outcomes of child sexual abuse: A current meta-analysis. *Aggression and Violent Behavior, 16*(1), 6-19 doi:10.1016/j.avb.2010.10.001.
- Yancey, C.T., & Hansen, D.J. (2010). Relationship of personal, familial, and abuse-specific factors with outcome following childhood sexual abuse. *Aggression and Violent Behavior, 15*(6), 410-421, doi:10.1016/j.avb.2010.07.003.