PREDICTORS OF TREATMENT OUTCOME IN SEXUALLY ABUSED CHILDREN

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ABSTRACT

Problem: This study evaluated the impact of child and family characteristics on treatment outcome of sexually abused children.

Method: Forty-nine recently sexually abused 7- to 14-year-old children were randomly assigned to either abuse-focused cognitive behavioral therapy or nondirective supportive therapy, and assessed pre- and post-treatment using several standardized instruments. These included five measures of psychological symptomatology and four measures of child and family characteristics hypothesized to mediate treatment response. Correlational and multiple regression analyses were utilized to evaluate the impact of the following mediating factors on treatment outcome: Children's abuse-related attributions and perceptions; family cohesion and adaptability; parental support of the child; and parental emotional reaction to the child's abuse.

Results: Children’s abuse-related attributions and perceptions and parental support of the child were strong predictors of treatment outcome in this population.

Conclusions: Therapeutic attention to children’s sexual abuse-related attributions and to enhancing parental support may be important factors in optimizing treatment outcome in 8- to 14-year-old sexually abused children. © 2000 Elsevier Science Ltd.

Key Words—Treatment outcome, Mediating factors, Sexually abused children, Attributions, Parental support.

INTRODUCTION

SEVERAL STUDIES HAVE examined factors which contribute to symptom formation and resolution following child sexual abuse. Some have evaluated the impact of personal characteristics of the child, while others have focused on the impact of familial factors in this regard.

A number of authors have demonstrated that specific attributions and perceptions of sexually abused children effect the psychological symptoms they develop. In particular, personal attributions (self-blame) for the sexual abuse have been found to correlate with a number of behavioral and emotional difficulties in sexually abused children (Hunter, Goodwin, & Wilson, 1992; Morrow, 1991; Spaccarelli, 1995). The Children’s Attributions and Perceptions Scale was developed to specifically measure abuse-related attributions and perceptions, including feeling different from peers, blaming oneself for negative events, feeling one is not believed by others, and decreased trust of others (Mannarino, Cohen, & Berman, 1994). This instrument strongly predicted psychological symptom formation, both at the time of abuse disclosure and 12 months post-disclosure (Mannarino
& Cohen, 1996a, 1996c). In addition to these factors, sexually abused children’s locus of control has been found to correlate with anxiety symptoms (Mannarino & Cohen, 1996c). To our knowledge, no studies have examined the impact of these child characteristics on treatment outcome following sexual abuse.

With regard to familial factors, Lynskey and Ferguson (1997) found in a longitudinal study that peer and family relationships (particularly paternal support) predicted psychological symptomatology in 18 year olds who had been sexually abused during childhood. Oates, O’Toole, Lynch, Stern, and Cooney (1994) demonstrated that familial dysfunction and poor maternal problem-solving abilities correlated significantly with behavioral problems in sexually abused children at an 18-month follow-up. Hanson, Saunders, and Lipovsky (1992) found a significant association between maternal distress and self-reported fear in sexually abused children. Lack of maternal support (Everson, Hunter, Runyan, Edelsohn, & Coulter, 1989; Friedrich, Luecke, Beilke, & Place, 1992; Leifer, Shapiro, & Kassem, 1993) and maternal depression (Kinard, 1995) have also been correlated with greater behavioral and emotional symptoms in sexually abused children. In a study of sexually abused preschool children (3–7 years old), the impact of demographic, developmental and familial factors on treatment outcome was examined. The strongest predictor of outcome at the time of treatment completion was the child’s parent or primary caretaker’s level of emotional distress related to the sexual abuse disclosure as measured by the Parent’s Emotional Reaction Questionnaire (PERQ) (Cohen & Mannarino, 1996). This was found to be true across two distinct treatment interventions.

It was not unexpected that preschool children’s response to treatment would be significantly impacted by their parents’ emotional state because of the their high degree of physical and emotional dependence on their caretakers; because school and peers generally are a minor influence compared to parents at this age; and because developmentally, preschoolers have limited cognitive ability to independently examine or reassess cognitive distortions, attributions or perceptions about the abuse. It is not clear whether older children’s response to treatment would be affected to such a degree by their parents’ abuse-related distress, or whether other factors such as parental support and the child’s own attributions and perceptions would have more influence on their response to treatment. We undertook the present study to address this issue. We hypothesized that all three of these factors (parental emotional reaction to the sexual abuse, parental support of the child, and the child’s attributions and perceptions) would significantly predict treatment outcome, independent of the type of treatment provided.

METHODS

Overview

The methodology used in this project has been described in detail previously (Cohen & Mannarino, 1998). Briefly, 49 sexually abused children aged 7–14 years and their nonoffending primary caretakers completed a 12-week treatment course of either sexual-abuse specific cognitive-behavioral therapy (SAS-CBT) or nondirective supportive therapy (NST). Treatment condition was randomly assigned and monitored for adherence to the assigned therapeutic model through the use of intensive training and supervision, specific treatment manuals, and monitoring and independent rating of audiotaped treatment sessions. Subjects were assessed pre- and post-treatment using a variety of standardized instruments.

Definition of Sexual Abuse

In an attempt to use an existing and commonly accepted operational definition, sexual abuse was defined as sexual exploitation involving physical contact between a child and another person.
Exploitation implies an inequality of power between the child and the abuser on the basis of age, physical size, and/or the nature of the emotional relationship. If the perpetrator was a child, he or she had to be at least 5 years older than the abused child. Physical contact included anal, genital, oral, or breast contact. For a child to be included in the study, it was required that the sexual abuse be substantiated by the local child protective service system or by an independent professional experienced in conducting investigative evaluations.

**Subjects**

Eighty-two subjects were recruited for the study within 6 months of having experienced independently validated contact sexual abuse perpetrated by someone at least 5 years older than the subject. Exclusionary criteria included mental retardation, pervasive developmental disorder, active psychosis or substance abuse, serious medical illness, lack of long-term (≥12 months) caretaker, and active psychosis or substance abuse in the primary caretaker. Subjects were referred from a variety of sources, including victim advocacy programs, Child Protective Services, police, juvenile and family court, private practitioners, and other mental health providers. No recruitment ads were placed.

Of the 82 subjects completing the initial assessment instruments, four did not return for any treatment. Of the 78 remaining subjects, 20 dropped out after completing eight or fewer sessions. In addition, 9 subjects (2 SAS-CBT, 7 NST) were removed from the treatment protocol due to persistent contact sexualized behaviors. Thus, a total of 49 subjects (30 SAS-CBT and 19 NST) completed the treatment and post-treatment (T2) assessment instruments, and are included in the data analyses.

The non-completers (dropouts and removed subjects) did not differ from the treatment completers with regard to any demographic (age, gender, SES), abuse specific (type of sexual abuse, number of abuse episodes, identity of perpetrator), or initial symptomatology variables. There were no significant differences on any of these variables between SAS-CBT and NST noncompleters. Demographic and abuse characteristics of the two treatment groups and the total subject pool are summarized in Table 1. There were no significant differences between the two treatment groups with regard to any of these variables.

**ASSESSMENT INSTRUMENTS**

*Overview*

The assessment instruments were divided into two general categories. The first category was outcome measures, that is, instruments which assess the child’s level of psychological symptomatology at different points in the study. The second category of instruments measured possible mediating factors in symptom persistence and treatment response in sexually abused children and adolescents.

The outcome measures were chosen for use in this study in two ways. First, instruments which have been empirically shown to measure aspects of abuse-specific issues and which have demonstrated psychometric properties were used. Secondly, certain instruments which measure non-abuse specific aspects of child psychopathology were included. The latter instruments were chosen on the basis of having shown elevated scores in sexually abused children in at least one empirical study in the past. These outcome instruments were administered at the initial evaluation and at the completion of treatment.

Factors which may mediate differential response to treatment were also explored. The investigators previously completed a study which evaluated the impact of a number of child and family factors on symptomatology in sexually abused children (Mannarino & Cohen, 1996a, 1996b).
These included self-blame, impaired trust, parental emotional reaction to the abuse, family functioning and maternal support. Instruments which best measure these factors were included in the study and were administered at the initial evaluation.

The following five instruments were utilized as outcome measures:

Child Behavior Checklist (CBCL): This measure was developed as a descriptive rating instrument to assess both adaptive competencies and behavior problems (Achenbach & Edelbrock, 1983). It is completed by the parent and can be used with children aged 2–16. The CBCL includes items...
which identify a variety of behavioral and adjustment problems. For the purposes of data analysis, only the four broad band factors (Social Competence, Behavior Profile Total, Internalizing, and Externalizing) were used. Test-retest reliability for the CBCL over a one week time interval is .88. There are norms for both the social competence scales and behavior problems scales.

State-Trait Anxiety Inventory for Children (STAIC): This instrument was initially developed as a research tool for the study of anxiety in elementary school children (Spielberger, 1973). It is completed by the child, and is comprised of separate, self-report scales for measuring two distinct anxiety concepts: state anxiety and trait anxiety.

For both the A-State scale and the A-Trait scale, each item has a 3-point rating scale for which values of 1, 2, or 3 are assigned for each of the three alternative choices. The STACI has been demonstrated to have adequate internal consistency, with alpha reliabilities of .84 and .80 for the A-State and A-Trait scales, respectively (Spielberger, 1973). There is normative data for the STAIC based on the responses of over 1500 school-aged children (Spielberger, 1973).

Children’s Depression Inventory (CDI): The CDI is a 27-item, self-rated symptom-oriented scale suitable for school-aged children and adolescents (Kovacs, 1985). Each of the 27 items on the CDI consists of three choices. Item choices are keyed from 0 to 2 in the direction of increasing symptom severity. The respondent is instructed to select the choice for each item that best describes him/her over the immediately preceding 2 weeks (Kovacs, 1985).

The CDI has been found to be highly reliability. Internal consistency ranges from .71 to .87. Test-retest reliabilities for time periods ranging from one month to nine weeks have been computed to be from .72 to .84 (Kovacs, 1985). There are norms for the CDI based on the responses of 860 public school children.

Child Sexual Behavior Inventory (CSBI): This instrument is a 42-item inventory of sexual behavior ranging from normal behaviors (e.g., “Pretends to be the opposite sex when playing”) to explicit sexual activity, and is completed by parents (Friedrich, Grambsch, et al., 1992). On a 4-point scale, the frequency to which the child has shown each behavior within the last 6 months (from “never” to “at least once a week”) is rated by the parent. Test-retest reliability after 1 month has been found to be .80. The CSBI has been administered to parents of normal children (N = 1,100) and psychiatric outpatients as well as to parents of sexually abused children. Norms are available for these populations.

The Trauma Symptom Checklist for Children (TSC-C): The TSC-C was written to identify abuse-specific issues (Briere, 1996). The TSC consists of 54 items with answers ranging on a 5-point scale. Factor analysis of the TSC-C revealed six subscales: anxiety, depression, post-traumatic stress, sexual concerns, dissociation, and anger. Internal consistency of each scale is very high, ranging from .80 to .92. The TSC-C also has two validity scores (under-response and hyper-response); cut-off scores are specified for these scales, with TSC-Cs beyond these cut-offs being considered invalid.

The following instruments measured possible mediating factors:

The Children’s Attributions and Perceptions Scale (CAPS): The CAPS was developed by the investigators to measure certain abuse-specific issues in sexually abused children (Mannarino et al., 1994). The CAPS is a semi-structured interview which consists of 18 items; the child is asked to respond to each item on a 5-point Likert scale ranging from “never” to “always.” The CAPS was written without specific reference to abuse, so that it could be given to control subjects as well. Factor analysis demonstrated four subscales, including feeling different from peers, decreased interpersonal trust, personal attributions for negative events (i.e., self-blame), and decreased perceived credibility (i.e., feeling that others do not believe you). Sample items include “Do you feel different than other girls your age?” “Do you blame yourself when things go wrong?” and “Do you ever feel that trusting people can be risky?” Internal consistency ranged
from .64 to .73 for the individual scales. Test-retest reliabilities ranged from .60 to .82. The CAPS is conceptualized to measure factors which may mediate the development and maintenance of other behavioral and emotional problems.

Family Adaptability and Cohesion Evaluation Scales-III (FACES III): This scale consists of 20 items which measure family adaptability and cohesion (Olson, Portner, & Lavee, 1985). Family adaptability is defined as the extent to which a family is flexible and able to change the way it functions in response to situational and developmental stress. Family cohesion is defined as the degree to which family members are emotionally supported, as well as how bonded or separated they are. Each item consists of a statement regarding some aspect of family functioning (e.g., “We like to do things with just our immediate family,” etc.). The parent is asked to describe his/her family at that point in time with regard to each item on a 5-point scale ranging from “almost never” to “almost always.” Test-retest reliabilities for the cohesion and adaptability scales have been reported to be, respectively, 0.77 and 0.62, and 0.68 for the total scale. Factor analysis demonstrated high inter-item correlation within each scale (Olson et al., 1985). Norms are available for parents.

Parent Emotional Reaction Questionnaire (PERQ): This instrument was designed by the investigators to measure parental emotional reactions to their child being sexually abused. It examines such reactions as fear, guilt, anger, embarrassment, and feeling upset. The PERQ consists of 15 items which describe specific parental emotional reactions to their child being sexually abused. Parents are asked to rate each item on a 5-point scale (e.g., 1—never, 5—always) regarding how well it describes their emotional response to their child’s sexual abuse. Sample items include “I have felt sad about my child being abused,” “I have felt ashamed about my child being abused,” and “I feel guilty that I did not know about the abuse sooner.” Internal consistency for the PERQ has been calculated to be .87. Two-week test-retest reliability has been computed to be .90. The PERQ was used by the investigators in an NCCAN-funded project to measure factors which mediate symptomatology in sexually abused school-aged children. The PERQ was found to significantly predict symptom persistence at 1-year follow-up (Mannarino & Cohen, 1996c) and to be a strong predictor of treatment outcome for sexually abused preschool children independent of the type of treatment provided (Cohen & Mannarino, 1996b).

Parental Support Questionnaire (PSQ): The investigators designed the PSQ to measure parental cognitions and perceptions of their own behaviors in response to their child’s sexual abuse experience. The PSQ consists of 19 items which examine the degree and kind of perceived parental support provided to the sexually abused child and the nature of the attributions that parents make regarding responsibility for the abuse (i.e., who is to blame). Parents are instructed to rate each item on a 5-point scale regarding how well it describes their response to their child’s sexual abuse. Higher scores reflect greater support to and less blame of the sexually abused child. Sample items include “Have you tried to make your child feel safe and secure since they reported the sexual abuse?” and “Do you ever feel the sexual abuse was your child’s fault?” Internal consistency has been calculated to be .73 and .70 for the “support” and “blame” subscales, respectively. Test-retest reliabilities after 2 weeks have been computed to be .70 for the support subscale, .83 for the blame subscale, and .82 for the full scale.

Treatment

Subjects were randomly assigned to one of the two treatment modalities through the use of Efron’s balanced coin toss method (Efron, 1980). In both treatment conditions, the abused child and nonoffending parent received 12 weeks of therapy with the child and parent both being seen individually for 45 minutes each week. The two treatments have been described in detail previously (Cohen & Mannarino, 1998), and are summarized below.
SAS-CBT was designed to target clinical issues with which sexually abused children frequently present. It includes specific interventions for depression, anxiety and behavioral difficulties in sexually abused children as well as for parental distress related to the sexual abuse.

It also includes components which attempt to enhance the parent’s support of and use of appropriate parent management skills with their children.

Specific interventions used in SAS-CBT included CBT methods which have been described in detail elsewhere (Ammerman & Hersen, 1993; Kazdin, Esvelt-Dawson, French, & Unis, 1987; Van Hasselt & Hersen, 1993): relationship-social skills building; monitoring and modification of automatic thoughts, assumptions and beliefs (cognitive reframing); thought replacement and positive imagery; and problem-solving skills training, including self-monitoring of behaviors and exploration of feelings.

NST was used as an alternative treatment to SAS-CBT. This form of NST was believed to be representative of supportive, non-cognitive behavioral treatments commonly provided to sexually abused children in the community, with the caveat that, in order to clearly distinguish it from the SAS-CBT intervention, NST therapists did not provide specific suggestions or directive advice. They did encourage exploration of alternative attributions, behaviors and feelings through the use of non-directive interventions.

Unlike SAS-CBT, the NST model did not have a structured format in which specific issues were addressed in certain sessions. Rather, issues were addressed as they were raised by the child or parent in treatment sessions. NST interventions focused on providing a high degree of nonjudgmental empathy and support, encouraging the child and parent to identify and resolve upsetting feelings, and reestablishing trust and positive interpersonal expectations.

Procedure

After phone screening of referred children for appropriateness for the study, an initial evaluation appointment for the child and nonoffending parent was arranged at the Investigators’ outpatient clinic. A clinical evaluation was completed by one of the Investigators. If the child met criteria for the study, the child and parent received detailed verbal and written descriptions of the project, and each gave informed consent. The Project Coordinator then administered the research instruments to the child and parent.

At the time of the initial assessment, each child was randomly assigned to one of the two treatment conditions. Efron’s biased coin toss (Efron, 1980) was used to ensure that the two groups were balanced with respect to (1) CBCL Total Behavior Problems; (2) gender; and (3) age.

The first treatment session occurred within 1 week of the initial assessment. Weekly therapy meetings were arranged for the subsequent 11 sessions. In general, the child and parent were scheduled for therapy during consecutive hours. All treatment in the proposed study was provided free of charge. At the end of the 12th treatment session, the assessment instruments were readministered by the Project Coordinator.

Data Analysis

Because we had already evaluated the impact of treatment type on outcome (Cohen & Mannarino, 1998), and wanted to look at the impact of other mediating factors in the present study, the two treatment groups were combined for these analyses. (The n, especially for the NST group, was also too small to conduct meaningful analyses of these mediating factors within each treatment group.)

We analyzed the relationships between the mediating factors and the outcome measures by first conducting correlational analyses. A separate step-wise multiple regression analysis was then performed on each outcome measure, with only those mediating factors which reached significance in the correlational analyses being entered as the predictor variables. The pretreatment (T1) score
of each outcome measure was first forced into each regression equation as a covariate. Demographic (age, gender, race, school placement, family composition), abuse-related variables (identity of perpetrator, type of abuse, number of abusive episodes), and mediating factors were then entered.

RESULTS

Correlational analyses were conducted to analyze the relationships between the hypothesized mediating factors and the outcome measures at posttreatment across the two treatment groups. Results of these analyses are summarized in Table 2.

The CAPS Feeling Different scale significantly correlated with the TSC-C Depression and PTSD scales as well as with the STAIC Trait scale. The CAPS Trust scale significantly correlated with the TSC-C Depression and PTSD scales. The CAPS Personal Attributions scale significantly correlated with the TSC-C Anxiety, Depression, PTSD and Dissociation scales, the CDI, and the CBCL Social Competence scale. It was significantly negatively correlated with the CBCL Behavior Profile Total score. The CAPS Perceived Credibility scale positively correlated with the TSC-C Anxiety, Depression, PTSD, Dissociation and Anger scales, as well as with the CDI and the STAIC Trait scale. The CAPS Total scale significantly correlated with all six TSC-C scales, the STAIC Trait scale, and significantly negatively correlated with the CBCL Behavior Profile Total score.

The FACES-III Cohesion scale was not significantly correlated with any outcome measures. The FACES-III Adaptability scale correlated significantly with all six TSC-C scales, and with the STAIC Trait scale.

The PSQ Support scale significantly negatively correlated with the STAIC State scale. The PSQ Blame scale and PSQ Total score significantly negatively correlated with the CDI scale. The PSQ Total score also significantly negatively correlated with the STAIC State scale.

The PERQ significantly correlated with the CBCL Social Competence scale and negatively correlated with the STAIC Trait scale.

Table 2. Correlations Between Mediating Factors and Outcome Measures at Posttreatment (T2)

<table>
<thead>
<tr>
<th>Mediating Measure</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAPS</td>
</tr>
<tr>
<td></td>
<td>Diff</td>
</tr>
<tr>
<td>TSC Anxiety</td>
<td>.227</td>
</tr>
<tr>
<td>Depression</td>
<td>.241*</td>
</tr>
<tr>
<td>PTSD</td>
<td>.322**</td>
</tr>
<tr>
<td>Sex concerns</td>
<td>.234</td>
</tr>
<tr>
<td>Dissociation</td>
<td>.214</td>
</tr>
<tr>
<td>Anger</td>
<td>.193</td>
</tr>
<tr>
<td>CSBI</td>
<td>-.106</td>
</tr>
<tr>
<td>CDI</td>
<td>-.007</td>
</tr>
<tr>
<td>CBCL Social</td>
<td>-.113</td>
</tr>
<tr>
<td>BP Total</td>
<td>-.109</td>
</tr>
<tr>
<td>Internal</td>
<td>-.133</td>
</tr>
<tr>
<td>External</td>
<td>-.047</td>
</tr>
<tr>
<td>STAIC State</td>
<td>.165</td>
</tr>
<tr>
<td>Trait</td>
<td>.426**</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001.
Table 3. Summary of Multiple Regression Analyses

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>$R^2$</th>
<th>Change</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSC Anxiety</td>
<td>CAPS—Perceived credibility</td>
<td>.26</td>
<td></td>
<td>16.75***</td>
</tr>
<tr>
<td></td>
<td>FACES-III—Adaptability</td>
<td>.12</td>
<td></td>
<td>9.58**</td>
</tr>
<tr>
<td>Depression</td>
<td>CAPS—Total</td>
<td>.24</td>
<td></td>
<td>11.92***</td>
</tr>
<tr>
<td>PTSD</td>
<td>FACES-III—Adaptability</td>
<td>.12</td>
<td></td>
<td>7.49**</td>
</tr>
<tr>
<td></td>
<td>CAPS—Total</td>
<td>.09</td>
<td></td>
<td>6.76*</td>
</tr>
<tr>
<td>Sexual Concerns</td>
<td>None</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Dissociation</td>
<td>CAPS—Personal attributions</td>
<td>.08</td>
<td></td>
<td>5.77*</td>
</tr>
<tr>
<td>Anger</td>
<td>CAPS—Total</td>
<td>.11</td>
<td></td>
<td>4.89*</td>
</tr>
<tr>
<td>CSBI</td>
<td>None</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>CDI</td>
<td>CAPS—Perceived credibility</td>
<td>.14</td>
<td></td>
<td>5.81*</td>
</tr>
<tr>
<td></td>
<td>PSQ—Blame</td>
<td>.12</td>
<td></td>
<td>6.17*</td>
</tr>
<tr>
<td>CBCL</td>
<td>None (any scales)</td>
<td>—</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>STAIC State</td>
<td>PSQ—Total</td>
<td>.14</td>
<td></td>
<td>5.4*</td>
</tr>
<tr>
<td></td>
<td>SES</td>
<td>.10</td>
<td></td>
<td>4.44*</td>
</tr>
<tr>
<td>Trait</td>
<td>None</td>
<td>—</td>
<td></td>
<td>—</td>
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</tbody>
</table>

*p < .05; **p < .01; ***p < .001.

The results of the multiple regression analyses are summarized in Table 3. The CAPS Perceived Credibility scale and the FACES-III Adaptability scales significantly predicted the TSC Anxiety score, together accounting for 38% of the total variance. The CAPS Total score significantly predicted the TSC Depression score, accounting for 24% of the total variance. The FACES-III Adaptability and CAPS Total scales significantly predicted the TSC PTSD score, together accounting for 21% of the total variance. The CAPS Negative Attributions scale significantly predicted the TSC Dissociation score, and the CAPS Total scale significantly predicted the TSC Anger score.

The CAPS Perceived Credibility and the PSQ Blame scales significantly predicted the CDI score, together accounting for 26% of the total variance. The PSQ Total scale and socioeconomic status significantly predicted STAIC State Anxiety, together accounting for 24% of the variance.

DISCUSSION

This study attempted to explore what factors predict treatment outcome in sexually abused 7- to 14-year-olds. It demonstrated that the Children’s Attributions and Perceptions Scale was a strong predictor of treatment outcome on several instruments. The FACES-III Adaptability scale and parental support as measured by the PSQ were also predictive of outcome.

The CAPS Perceived Credibility and the FACES-III Adaptability scales significantly predicted outcome on the TSC-C Anxiety scale, together accounting for 38% of the total variance. This finding suggests that feeling that others do not believe what you have said, and a very high degree of family adaptability contribute significantly to trauma-related anxiety symptoms. While it makes intuitive sense that not being believed (particularly about sexual abuse disclosure) would contribute to anxiety, it is not so readily obvious why high levels of family adaptability would do so. We have discussed similar findings with the FACES-III Adaptability scale elsewhere (Mannarino & Cohen, 1996b). Many of the items on this scale (for example, “Our family changes its way of handling tasks,” “It is hard to tell who does which household chores,” “The children make the decisions in our family,” “Rules change in our family,” and “It is hard to identify the leader[s] in our family”) may represent a degree of familial flexibility which, while highly adaptable, may not be conducive to symptom resolution in these sexually abused children (many of whom have experienced
significant recent familial changes due to abuse disclosure, etc.). It is possible that for such children, a high degree of structure and predictability in family functioning may be more helpful than a high level of familial adaptability. A similar result was obtained for the TSC-C PTSD scale, that is, the CAPS Total score and the FACES-III Adaptability score best predicted outcome, accounting for 21% of the total variance.

The CAPS Total score alone accounted for 24% of the total variance on the TSC-C Depression scale and for 11% of the variance on the TSC-C Anger scale. This is additional evidence of the prominent role that abuse related attributions and perceptions play in symptom formation and resolution, and emphasizes the importance of addressing these issues in treatment for sexually abused children.

Interestingly, the CAPS-Personal Attributions scale was the only significant predictor of dissociation on the TSC-C. A possible explanation for this finding is that children who hold themselves responsible for negative events such as sexual abuse may experience more pain when they have thoughts and feelings about the event, rather than children who do not blame themselves; this may result in greater dissociative symptoms as an attempt by these children to protect themselves from that pain.

Depression as measured by the CDI was significantly predicted by the CAPS-Perceived Credibility scale and the PSQ-Blame scale, which together accounted for 26% of the total variance on the CDI. This finding supports the idea that children who feel they are not believed and who feel they are blamed for the sexual abuse are more prone to depressive symptoms.

Finally, the finding that State Anxiety was significantly predicted by parental support and SES reinforces the importance of familial support and stability in minimizing transient anxiety symptoms.

Taken together, these findings strongly support the idea that psychological symptoms in sexually abused children are significantly affected by both family and individual cognitive factors. The consistency of the impact of sexually abused children’s attributions and perceptions on their psychological symptoms is particularly striking, and makes a convincing argument that addressing these issues is an important component of therapy for this population. The fact that the SAS-CBT intervention was superior to the NST intervention in decreasing depressive symptoms (Cohen & Mannarino, 1998) may largely be due to the strong focus the SAS-CBT intervention has on addressing and correcting distorted attributions and perceptions about the sexual abuse.

Of interest is the fact that none of the hypothesized mediating factors significantly predicted outcome on the CSBI or any of the CBCL scales. It is possible that sexualized behaviors are influenced less by family factors or the child’s internal cognitions about the abuse, than they are by other factors such as the child’s level of anger, lack of education regarding appropriate sexuality, or parenting abilities in managing inappropriate behaviors. The difficulties measured by the CBCL broad band scales may be too general to be significantly impacted by sexual abuse-specific mediating factors in this age group.

The hypotheses that parental support and the child’s attributions and perceptions would significantly predict treatment outcome independent of the type of treatment provided were supported by the findings of this study. However, contrary to our predictions, parental emotional reaction to the child’s sexual abuse was not found to significantly predict treatment outcome for these children. This finding suggests that, unlike preschool children, whose symptoms are most strongly impacted by their parent’s emotional distress, older sexually abused children’s psychological symptoms are more strongly impacted by their own abuse-related cognitions and perceptions, and by parental support and familial stability and predictability.

The major shortcoming of this study was the fairly large dropout rate during treatment (25.6%). Combined with the necessity of removing nine subjects due to persistent sexually inappropriate behavior, these dropouts substantially decreased the total number of subjects who completed
treatment. This in turn limited the power of the data analyses, and precluded our ability to conduct analyses within treatment groups.

Despite this limitation, the findings from this study have important treatment implications. They particularly emphasize the importance of addressing the child’s sexual-abuse related cognitions in treatment, and of including nonoffending parents in treatment to enhance parental support and belief of the child, as well as to encourage the predictability and stability of family functioning. The results of this study suggest that such interventions will optimize the emotional adjustment of children who have experienced recent sexual abuse.

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REFERENCES


RÉSUMÉ

Problème: Cette étude a évalué l’influence des caractéristiques de l’enfant et de sa famille sur les résultats du traitement des enfants qui ont subi des sévices sexuels.

Méthode: Quarante-neuf enfants de 7 à 14 ans choisis au hasard ont été orientés soit vers une thérapie comportementale cognitive centrée sur l’abus soit vers une thérapie non-directive de soutien. Avant et après le traitement ils ont été soumis à une évaluation à l’aide de plusieurs instruments standardisés. Ces derniers incluaient cinq mesures de la symptomatologie psychologique et quatre mesures des caractéristiques propres à l’enfant et à la famille qui par hypothèse devaient induire la réponse au traitement. C’est en recourant à l’analyse des corrélation et de la régression multiple que l’on a évalué l’impact des facteurs suivants sur l’effet du traitement: les attributions et perceptions des enfants relatives aux sévices; la cohésion de la famille et sa capacité d’adaptation; le soutien des parents à l’égard de l’enfant; la réaction émotionnelle des parents aux sévices subis par l’enfant.

Résultats: Les attributions et les perceptions des enfants relatives aux sévices ainsi que le soutien des parents ont permis de fortement prédire le résultat du traitement pour cette population.

Conclusions: Porter une attention thérapeutique sur ce que les enfants mettent sur le compte des sévices sexuels ainsi que sur l’amélioration du soutien par leurs parents peut contribuer de façon importante à optimiser les résultats du traitement des enfants de 8 à 14 ans ayant subi des sévices sexuels.