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The Impact of Sexual Abuse and How Children Cope: Different Perspectives from Caretakers and Children

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Abstract

Child sexual abuse is a complicated stressor with a broad range of associated symptoms. It has been suggested that the coping techniques children utilize may act as a mediating variable in the relationship between child sexual abuse and subsequent difficulties. Until recently, child sexual abuse sequelae were assessed in a piecemeal fashion, with individual tests for each symptom domain and reporter. However, recent developments in the area of trauma assessment have provided researchers with complementary caretaker- and self-report measures to assess a broad range of trauma-related symptoms (i.e., the Trauma Symptom Checklist for Young Children [TSCYC] and the Trauma Symptom Checklist for Children [TSCC], respectively). This project utilized the intake assessment data from children who were beginning psychotherapy services subsequent to sexual abuse. The TSCYC is a relatively new measure, therefore, Study 1 evaluated its internal consistency (N=308), the correlation between the caretaker- and self-report measures (N=135), and the convergent validity of the TSCYC with other caretaker-report measures of children's symptoms (N=135). The results indicated that the TSCYC has good internal consistency and convergent validity. The inter-correlation of the TSCYC and TSCC is quite low and consistent with other studies attempting to understand multi-informant assessment processes. Children and their caretakers describe very different pictures when asked about the children's difficulties. Study 2 (N=98) then evaluated the relationship between children's coping style as assessed by the KIDCOPE and trauma-related symptoms as reported by the children themselves and their caretakers. Overall, more external coping behaviors were associated with an increase in caretaker-reported symptoms, but internal coping was associated with

more self-reported symptoms among children between the ages of eight and twelve years. The implications of these findings and future directions for research are discussed.

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Overall, approximately 20% to 30% of females and 10 to 15% of males have been sexually abused (Finkelhor, Hotaling, Lewis, & Smith, 1989), but it is noteworthy that this estimate increases significantly among populations of children referred for mental health services. Among psychiatric inpatient and outpatient populations, the prevalence of child abuse is generally reported to be in excess of 50% (Hanson, Hasselbrock, Tworkowski, & Swan, 2002). One study reviewing charts at an adolescent inpatient psychiatric unit found that 60% of all patients had experienced at least one or more traumatic events (Weine, Becker, Levy, Edell, & McGlashan, 1997). Specifically, they found 10% had experienced physical abuse, 12% experienced sexual abuse, 52% had experienced the loss of a caregiver through death or separation, 14% witnessed domestic violence in the home, and 8% experienced gross neglect (Weine et al., 1997). Other studies have found that 30% of adolescents treated at a residential chemical dependency treatment center were identified as physically and/or sexually abused (Cavaiola & Schiff, 1988), and 28% of child psychiatric inpatients have reported being sexually abused (Kolko, Moser, & Weldy, 1988). A comparable study among an outpatient psychiatric sample found that 31% of children reported sexual abuse (Lanktree, Briere, & Zaidi, 1991). Other studies reported that as many as 70% of non-psychotic female psychiatric emergency room patients had reported histories of childhood sexual victimization (Briere & Zaidi, 1989).

Despite the frequency with which children experience traumatic events, few trauma-related assessment tools exist and even fewer are standardized. Some research measures have been created to fill this void, but they lack the necessary standardization information

and data on clinical psychometrics necessary to be optimal for clinical settings. In addition, these measures are often designed to assess a specific cluster of symptoms (e.g., dissociation) and not the broad range of sequelae often seen among children who have experienced a trauma. Until recently, only two standardized, trauma-related measures existed. The Trauma Symptom Checklist for Children (TSCC) is a self-report measure designed to assess a broad range of trauma-related symptomology, including post-traumatic stress disorder (PTSD), anxiety, depression, dissociation, anger, and sexual behavior concerns (Briere, 1996). The Child Sexualized Behavior Inventory (CSBI) is a caretaker-report measure designed to assess the abnormal sexual behavior frequently seen among children who have been sexually abused (Friedrich, 1997).

Consequently, the Trauma Symptom Checklist for Young Children (TSCYC) was recently developed and standardized to address the absence of a caretaker-report measure to broad trauma-related symptomology (Briere, 2005). It was designed to complement the TSCC and allow for a multi-informant assessment. However, due to the recent introduction of the TSCYC, little research has been published using this measure or further evaluating its reliability and validity. In fact, a recent search of the Social Science Citation Index indicated that the TSCYC has only been cited in two other articles since its initial publication. Despite the lack of more extensive psychometric data for the TSCYC, it is being used extensively among clinicians who work with traumatized children because this measure fills a significant void within the battery of existing instruments available to assess trauma sequelae.

Any assessment with children should invariably include the child's caretakers as well, but clinicians should not expect that multiple informants will report symptomology on a consistent basis (Grillis & Ollendick, 2002). Whereas, children appear to be accurate

reporters of their own level of stress and subjective affective symptoms such as depression and anxiety, their caretakers are more accurate sources of information about behaviors such as aggression, oppositionality, and avoidance (McNally, 1991). Ideally, teachers should also be included because they are the most accurate reporters of peer relationships and interpersonal functioning (Cavell, Meehan, & Fiala, 2003).

There can be substantial differences among informants' reports about a child's symptoms. One study found a correlation of only .22 between a child's self-report and other informants' report of the child's symptoms (Achenbach, McConaughy, & Howell, 1987). This lack of correspondence between the different informants' report of symptoms reflects the need for a multi-informant approach to the assessment. Furthermore, parents who have undergone a traumatic event themselves often are unable to recognize the distress that their children report feeling (Peterson, Prout, & Schwartz, 1991). However, other studies have found that parents can be sensitive to the internal affective states of their children by noticing changes in their outward behavior. For example, parents may be able to reliably identify depressive symptomology in their children because they notice a decreased interest in activities (Kazdin, Esveldt-Dawson, Sherick, & Colbus, 1985).

Ultimately, a multi-informant assessment is needed because there are many challenges inherent to the assessment of child trauma. Children may be avoidant or deny that the abuse event occurred (Shapiro & Dominiak, 1990). Assessment may also be difficult because victims may feel shame as a result of their trauma history (Wyatt, Loeb, Solis, & Carmona, 1998). Younger children may also lack the meta-cognitive skills necessary in order to be able to accurately report symptoms (Salmon & Bryant, 2002). Ultimately, many factors may interact to cause some to question the reliability of children's report of their

difficulties. However, parents' report of symptoms may not be accurate because they may be unaware of their children's internalized symptoms. Consequently, a multi-informant approach is recommended. The addition of the TSCYC is a significant improvement to the existing choices available of trauma-related assessment tools and allows for a multi-informant assessment. However, little research has evaluated the relationship between the self-report TSCC and the caretaker-report TSCYC.

Trauma Sequelae

It is important to have standardized, trauma-related assessment tools because of the wide ranging and complex impact the experience of a traumatic event can have on a child. While the TSCYC is designed for use with children who have experienced all types of traumatic events, this project focused on its use with children who have been sexually abused. In general, children who are sexually abused are more symptomatic than children who are not, and the abuse itself accounts for 15% to 45% of the variance in symptoms (Kendall-Tackett, Williams, & Finkelhor, 1993). There is no one symptom or symptom cluster present in a majority of children who have been sexually abused; however, there are several symptom clusters that are commonly seen (Kendall-Tackett, et al., 1993). School-age children most often experience fear, aggression, nightmares, school problems, hyperactivity, and regressive behaviors. Adolescents most commonly display depression, withdrawal, suicidal or self-injurious behaviors, somatic complains, illegal acts, running away, and substance abuse (Kendall-Tackett et al., 1993). The symptom clusters that are commonly seen fall into three types of responses: core trauma responses, secondary trauma responses, and associated symptoms.

Core Trauma Responses: Post-Traumatic Stress Disorder & Dissociative Disorders

Core trauma responses are those symptom clusters that are almost invariably linked to a traumatic event. In other words, the experience of a traumatic event is essentially a prerequisite for the diagnosis of a core trauma response (i.e., PTSD or a dissociative disorder). In general, the avoidance symptoms associated with posttraumatic stress disorder are thought to develop to protect children from experiencing distressing feelings associated with a traumatic event (Fletcher, 1996). Children attempt to avoid thoughts and stimuli associated with the traumatic event and suppress any distressing feelings. But, in addition to stimuli directly associated with the traumatic event, the fear can become generalized to previously harmless stimuli (Fletcher, 1996). For example, if a child experienced a trauma in a car, he or she may come to fear all cars. The avoidance of anxiety-provoking stimuli becomes reinforcing because the avoidance, while oftentimes problematic in some ways, does result in at least temporarily decreased distress.

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for a diagnosis of PTSD requires that a child has "experienced, witnessed, or was confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others" and that the child responded with "intense fear, helplessness, horror,… disorganized, or agitated behavior (American Psychiatric Association [APA], 2000, p. 467). Approximately 32% to 48% of children who have been sexually abused meet criteria for a diagnosis of PTSD and up to 80% experience at least some posttraumatic stress symptoms (Briere & Elliott, 1994; Dykman & McPherson, 1997; Kendall-Tackett et al., 1993). In addition, PTSD in response to an acute trauma only occurs in 25% of cases, but the risk of PTSD increases to 90% among those who have experienced chronic, interpersonal traumas such as sexual abuse or domestic violence (Fletcher, 1996).

The symptoms of post-traumatic stress disorder (PTSD) fall into three distinct clusters: re-experiencing, avoidance/numbing, and increased arousal. At present, the DSM-IV makes little reference to differences in PTSD symptom expression among adults and children or adolescents. However, a confirmatory factor analysis study conducted to compare PSTD symptom expression among children and adolescents found three clusters similar to those symptom clusters experienced by adults: Intrusive/Active Avoidance, Numbing/Passive Avoidance, and Arousal (Anthony, Lonigan, & Hecht, 1999). The DSM-IV does, however, note that children are more likely to experience nightmares or night terrors, repetitive trauma themes in play, art, or conversation, and trauma-specific re-enactment as opposed to standard re-experiencing symptoms (APA, 2000).

The DSM-IV re-experiencing cluster includes the following symptoms: recurrent recollections, repetitive play, distressing dreams, night terrors, feeling that the event is recurring, distress following exposure to traumatic cues, and physiological reactivity. With a developmental psychopathology framework, professionals need to consider how symptoms would be different in younger children. Kerig et al. (2000) examined the developmental differences of PTSD symptom expression across adolescent and school-age children. They theorized that, within the re-experiencing cluster, symptom expression among adolescents and school-age children can include recurrent revenge/rescues fantasies, new fears (e.g., monsters, dark, etc.) which may seem unrelated to trauma, reactivity, and somatic complaints. In addition, while adolescents are more likely to experience a feeling that the event is recurring, school-age children tend to experience only sounds and/or visual images of the traumatic event (Pynoos & Nader, 1990).

The avoidance/numbing symptom cluster includes avoidance of thoughts/feelings about the event, avoidance of people/places/activities, inability to recall the event, diminished interest in activities, detachment from others, restricted range of affect, and a sense of a foreshortened future. The expression of this symptom cluster can be particularly different among adolescents and school-age children (Kerig, Fedorowicz, Brown, & Warren, 2000). Instead of avoiding thoughts or feelings, children and adolescents may appear to be inattentive at times. They may also withdraw from peers or begin to act out against others, skip school, or refuse to attend school. Part of the difference in symptom expression may stem from the fact that children have less direct control over their lives to avoid people, places, and activities; instead, they may begin to exhibit phobic behavior. Children and adolescents also tend to display sadness and guilt, as opposed to displaying a restricted range of affect (Kerig et al., 2000).

Finally, the increased arousal symptom cluster includes difficulty sleeping, irritability/anger, difficulty concentrating, hypervigilance, and an exaggerated startle response. In adolescents, difficulty sleeping may either involve problems with sleep initiation or having difficulty waking up from heavy sleep (Kerig et al., 2000). School-age children may evidence irritability which may present as oppositionality. In addition, both school-age children and adolescents may have difficulty concentrating which could manifest as having academic difficulties. This is often misinterpreted as ADHD symptoms and not traumatic stress symptoms. School-age children may also become obsessed with the details of the trauma instead of displaying the hypervigilance or avoidance more common in adults and adolescents.

Dissociation is the "disruption in the normally occurring linkages between subjective awareness, feelings, thoughts, behavior, and memories, consciously or unconsciously invoked to reduce psychological distress (Briere & Elliott, 1994, p. 59). Essentially, dissociation is the mind's way of protecting a child from the emotional pain associated with abuse experiences or recollections of the abuse. A traumatic experience at an early age has been found to increase the levels of pathological dissociation among children and adults (Chu & Dill, 1990; Fink & Golinkoff, 1991).

Children can experience significant distress and impairment due to dissociative symptomology, but they may not fit the criteria of a specific dissociative diagnosis (Putnam, 1997). While dissociative identity disorder (DID) has been linked with child abuse, DID is actually very rare (APA, 2000). Putnam (1993) defined the essential feature of dissociation in children as amnesic periods and/or trance-like states in addition to marked changes in behavior and functioning. Children who display dissociation often present with "disruptive behavior problems, flashes of anger, lapses of awareness, and trance-like states" (Putnam, Hornstein, & Peterson, 1996, p.351). They also are described as having more difficulty than is typical in separating their fantasy lives from reality. Older children and adolescents who display significant levels of dissociation frequently present with self-mutilation, suicidal ideation, depression, aggression, running away, sexual promiscuity, and substance abuse (Putnam et al., 1996). It is estimated that up to 48% of school-age children and adolescents who have been abused experience some dissociative symptoms (Fletcher, 1996). In addition, dissociation during the trauma itself, peritraumatic dissociation, also increases the risk for long-term difficulties with dissociative symptoms (Putnam, 1997).

Researchers have studied a variety of demographic, social, and familial correlates with dissociative symptomology. As children age, the percentage of females relative to males who exhibit dissociative symptoms increase. Fifty-five percent of preschool children meeting the criteria for a dissociative disorder are female, and this increases to 83% by adolescence; however, researchers are unsure of the reasons for the gender differences found with regard to dissociative symptomology (Putnam et al., 1996). Older children and adolescents with dissociative disorders display more severe and disruptive symptoms than younger children (Putnam et al., 1996). The dissociative symptoms reported more frequently among older children are amnesia, identity disturbance, altered personality states, and internalized auditory hallucinations. The frequency of core trance-like states reported does not change as children age.

Secondary Trauma Responses: Depression & Anxiety

Secondary trauma responses are those psychological disorders which can be associated with the experience of sexual abuse, but the abuse itself is not a prerequisite for such a diagnosis. In general, secondary trauma responses are affective disorders (i.e., depression and anxiety). They may exist co-morbidly with a primary trauma response or they may be present in isolation.

When attempting to account for the levels of depression and anxiety among sexually abused girls, 40% to 50% of the variance was accounted for by perceived parental support; the development of negative cognitive appraisals as a result of the abuse; and the use of avoidance as a coping strategy, with a majority of that variance being accounted for by perceived support from the non-offending parent (Spaccarelli & Fuchs, 1997). In addition, among children receiving outpatient mental health services, sexual abuse victims are four

times more likely to be depressed (Briere & Elliott, 1994). When comparing sexual abuse outcomes between boys and girls, girls tend to have greater difficulties with depression and separation anxiety (Dykman & McPherson, 1997).

Survivors of child sexual abuse are five times more likely than their non-abused peers to meet diagnostic criteria for generalized anxiety disorder, phobias, panic disorders, and/or obsessive compulsive disorder (Briere & Elliott, 1994). In addition, fear was most commonly reported, and the proportion of children with difficulties related to fear ranged from 40% to 80% (Browne & Finkelhor, 1986). The link between anxiety disorders and sexual abuse is likely related to the learned association between negative experiences, such as coercion, devaluation, and physical pain, and interpersonal relationships which are supposed to be supportive and nurturing. Children then respond to other interpersonal relationships by experiencing fear and anxiety (Briere & Elliott, 1994).

Estimates of trauma survivors who experience concurrent depression and PTSD range as high as 56%, and symptoms of depression appear to be more severe among those with concurrent PTSD (Bleich, Koslowsky, Dolev, & Lerer, 1997). In addition, the experience of depressive symptoms prior to a traumatic event increases the risk of subsequent depression, but not the risk of PTSD (Smith, North, McCool, & Shea, 1990). Premorbid depression also increases the risk for developing maladaptive cognitions in response to sexual abuse (Briere, 1992).

Associated Symptoms

Associated symptoms are those difficulties that are associated with child sexual abuse, but they may not rise to the level of a diagnosable disorder. Associated symptoms can include aggression, self-esteem difficulties, the use of maladaptive coping styles,

interpersonal difficulties, and sexualized behavior. In general, child sexual abuse has been linked to subsequent guilt, low self-esteem, and self-blame (Briere, 1992).

There are many possible pathways to link child sexual abuse and later difficulties with anger and aggression. Some researchers have postulated that trauma is related to conduct disorder because the violation of basic trust, disrupted attachment, and impaired feelings of empathy can reduce inhibitions regarding crimes against others (James, 1989). Others have suggested that trauma contributes to a sense of a foreshortened future which orients children to want immediate self-gratification and to possibly anger and upset others in the attempt to satisfy their immediate desires (Terr, 1991).

Anger and hostility are commonly seen among children who have been sexually abused. Estimates of the number of sexually abused children experiencing difficulties with anger vary widely depending on the age of the children. For example, 13% to 17% of 4- to 6-year-olds had significant difficulties with aggression and antisocial behaviors, but 23% to 50% of school age and adolescent children displayed anger difficulties (Browne & Finkelhor, 1986). In addition, between 70% and 92% of antisocial youth report experiencing a traumatic event (Greenwald, 2002). Furthermore, boys generally experience more difficulties with externalizing symptoms following abuse (Dykman & McPherson, 1997). Among sexually abused boys, 62% experienced significant difficulties with ADHD, 54% with oppositional defiant disorder, and 69% with conduct disorder. Aggressive behaviors among girls are related to the amount of abuse-related stress (i.e., coerciveness, victim denigration, family conflict, and public disclosure-related events) they are experiencing (Spaccarelli & Fuchs, 1997).

Other symptoms associated with sexual abuse involve the family environment. Correlates of sexual abuse, and particularly incest, include alcoholism, chaotic family situations, poor supervision, lower levels of intimacy, and substance use (Alexander & Schaeffer, 1994). It is important to consider overall family dynamics because family chaos and disruption have been found to be related to elevations in behavior problems, irrespective of physical or sexual abuse (Wolfe & Mosk, 1983).

Sexualized behaviors are also commonly seen among children who have been sexually abused. Twenty-seven percent of 4- to 6-year-olds and 36% of 7- to 13-year-olds exhibited age-inappropriate sexualized behaviors (Browne & Finkelhor, 1986). While younger children tend to exhibit sexualized behaviors, adolescents tend to engage in frequent, short-term sexual activity with multiple partners (Briere & Elliott, 1994). Due to these behaviors, adolescents are at a greater risk for unintended pregnancies, further victimization, and sexually transmitted diseases.

Several hypotheses exist to account for the relationship between sexual abuse and subsequent difficulties related to sexuality and sexualized behavior. One theory suggests that it is simply the premature introduction of sexual behaviors which leads children to become more interested in and preoccupied with sex (Briere, 1992). A second theory posits that children may come to believe that sexual behavior is the only way they are able to gain acceptance and interpersonal closeness from others (Briere, 1992). Finally, children may come to avoid and fear both sexual behaviors and thoughts of sex because they associate sex with both the physical and emotional pain they may have felt as a result of the abuse. It is possible, however, that children may experience both avoidance and fear of sex-related

behaviors and thoughts as well as sexualized behaviors at the same time, or they may oscillate between the two extremes (Briere, 1992).

Transactional Model

In addition to understanding the sequelae commonly seen in children who have been sexually abused, it is important to understand those factors that can potentiate and/or mitigate the impact of sexual abuse. Spaccarelli (1994) proposed a transactional model for understanding these influences (see Figure 1). A transactional model posits that development occurs through a series of person-environment interactions that determine the course of either normative or psychopathological outcomes (Sameroff & Fiese, 1990).

Spaccarelli's model (1994) is based on three main principles. The first principle is that children who have been sexually abused face a series of stressors. Three main types of stressful events are identified: (1) Stressful events can be associated with the abuse itself and include developmentally inappropriate exposure to sex, coercion in the form of physical force, threats of physical force, or psychological coercion, feelings of guilt and shame, and violations of trust with the perpetrator. (2) Stressful components to the trauma may also be abuse-related events. These types of events include increased family conflict, parental separation, increased social isolation of the victim, and non-supportive reactions to the disclosure of the abuse. (3) The final type of stressful events involves the disclosure itself. The disclosure of child sexual abuse can result in the child being removed from the home, therapeutic and investigative interventions, and participation in court proceedings. All of these types of events can be additional sources of stress to a child who has been sexually abused; they constitute the "abuse stress" component of this model.

The second principle of this transactional model for understanding sexual abuse outcomes suggests that there is not a direct relationship between abuse stress events and subsequent psychological symptoms. Instead, the transactional model suggests that the impact of the stressful events associated with sexual abuse are mediated by cognitive appraisals and coping strategies (Spaccarelli, 1994). Cognitive appraisals refer to the meanings a child may attach to the abuse. For example, children may feel that they have been physically or emotionally damaged; they may perceive relationships as a potential source of harm; or they may hold negative evaluations of others in general. Coping strategies may be problematic and can include avoidant or angry coping. They may also be adaptive and can include seeking support and seeking to master feelings of shame, weakness, or powerlessness. Within this framework, the use of coping strategies and cognitive appraisals, which themselves can be either adaptive or problematic, are moderated by children's support resources and other intrapersonal variables such as age, gender, and personality characteristic. As an illustration, children with a stronger support system, a moderator variable, may be more likely to develop adaptive cognitive appraisals and coping strategies which would then mitigate the impact of sexual abuse.

The final principle of Spaccarelli's (1994) transaction model is that the relationships between abuse stress, coping strategies/cognitive appraisals, and cognitive symptoms are bi-directional. This principle recognizes the complexity inherent in understanding the impact of child sexual abuse in children. A child who experiences a significant amount of "abuse stress" may be more likely to display increased subsequent symptomology; however, the causal relationship may also proceed in the opposite direction. For example, a child with problematic family dynamics may have developed ineffective coping strategies prior to

experiencing abuse. Because of these coping strategies, subsequent sexual abuse may have a more profound impact (i.e., cause more severe symptomology) than it would on a child who uses more effective coping strategies.

Although many clinicians believe that there is a clear relationship between the age at onset, duration, and frequency of the sexual abuse and later functioning, the research attempting to corroborate these relationships is very contradictory. At this time, a review of many studies of sexual abuse determined that there are no clear connection between frequency/duration and the age at onset of the abuse with later outcomes (Putnam, 2003). This may be because duration/frequency and age at onset are closely related to each other as well as to many other aspects of the abuse (e.g., a younger child is more likely to be abused by a caretaker and consequently, the abuse may continue for a longer duration because caretakers have greater access); further research will need to be completed to better understand these relationships.

The relationship between the degree of intimate contact during sexual abuse and the relationship of the abuser to later outcomes is much clearer. In general, female victims of sexual abuse which was perpetrated by the father or the father-figure tend to have more subsequent difficulties than do children with other types of relationships to the perpetrator (Browne & Finkelhor, 1986). Research has also clearly supported the fact that adolescent perpetrators tend to be less traumagenic for children than adult perpetrators. In addition, the degree of intimate contact and force used during sexual abuse are both directly related to the subsequent impact of the abuse (Browne & Finkelhor, 1986).

Coping

The transactional model discussed above posits that a child's coping strategies and cognitive appraisals are one of the key mediating variables in understanding the impact of sexual abuse (Spaccarelli, 1994). Within this model, cognitive appraisals are the meanings children attach to the abuse and coping refers to the overt behaviors used by children. However, the delineation between the two is generally not as distinct as this model would suggest. A more general definition of coping is those behavioral and emotional responses which individuals use to manage their distress (Draucker, 1989). Using this definition, for example, children may utilize avoidant coping and both avoid interacting with others (behavioral) and hold negative evaluations of others (emotional/cognitive appraisal). Therefore, for the purposes of this study, the term coping refers to the more general definition that includes overt behavioral coping, emotion-focused coping, and cognitive appraisals.

When individuals' experience a distressing event, they generally seek to find meaning in the experience, regain their sense of mastery and control over their life, and enhance their self-esteem (Taylor, 1983). However, it is important to note that, while the purpose of any coping technique is to reduce an individual's distress associated with that traumatic event, the strategies used may not be socially appropriate or support a child's emotional health and they may in and of themselves bring about additional distress. For example, a traumatized child may utilize angry/aggressive coping techniques. While this may improve their sense of mastery and enhance their self-esteem, angry and aggressive behavior may bring about additional distress due to conflicts with peers or adults. Essentially, all coping techniques are adaptive in that they allow an individual to manage the troubling feelings associated with the

traumatic event, but those same techniques may not necessarily be socially appropriate or psychologically healthy.

Understanding the role that coping plays as a mediating mechanism between the relationship of sexual abuse and subsequent outcomes are important for several reasons. The identification of any mediating mechanism suggests that a traumatic experience does not necessarily dictate subsequent psychological distress (Spaccarelli & Kim, 1995). In fact, studies have shown that between 20% and 50% of sexually abused children are asymptomatic when evaluated shortly after the abuse has occurred (Kendall-Tackett et al., 1993; Spaccarelli, 1994). Instead, it identifies a mechanism by which some children may be more resilient after experiencing a traumatic event. The identification of this mechanism also allows for professionals to understand how coping can be an area of therapeutic intervention (Spaccarelli & Kim, 1995).

The coping style children and adolescents use has been found to change depending on the particular internal and external demands of a given situation (Lazarus & Folkman, 1984). Coping styles also vary depending on the child's developmental level, external support systems, and current psychological distress (Oaksford & Frude, 2003). It has been suggested that the variations in coping styles used can account for fluctuations in symptomology that commonly follow a traumatic event. While symptoms generally abate over time, between 10% and 24% of children appear to get worse (Kendall-Tackett et al., 1993). This fluctuation may be related to a child's use of different coping styles as they attempt to manage their feelings associated with the traumatic event.

One theory posits that children's ability to use various coping styles is based on many developmental factors including, their personality, sensitivity/social perception, morality,

perceptual motor skills, attention, cognitive linguistic abilities, motivation, and humor (Anderson & Messick, 1974). However, a second theory also recognizes that the cognitive appraisals children make after a trauma will depend on their memory, language abilities, temporal sequencing abilities, and overall understanding of the traumatic event (Peterson, 1989). For example, a child who experienced an earthquake might not have the factual knowledge to understand that such natural disasters are relatively rare. Finally, not only do the coping techniques change depending on a child's development level, but the effectiveness and social appropriateness of the various coping technique changes (Peterson, 1989). For example, it may be appropriate for a young child to be very dependent on his parent and tearful upon separation, but this may not be an appropriate coping technique for an adolescent. Overall, the implications that children's developmental level contribute to their use of various coping techniques is complex and profound and must be taken into consideration when attempting to understand coping among child and adolescent populations.

Many different coping styles have been identified and described in the literature. The simplest delineation involves the division of coping style into two categories, Approach and Avoidance; however, even these two main categories lack any consistent nomenclature (Roth & Cohen, 1986). For example, an Approach style has also been described as Active, Monitoring, and Attention and Avoidance has also been termed Passive, Blunting, and Rejection (Miller & Mangan, 1983; Mullen & Suls, 1982; Spirito, Stark, & Williams, 1988). The definitions for the various terms may differ somewhat, but all reflect similar constructs. Another theory has suggested that coping styles should be delineated into either Problem- or Emotion-Focused categories (Lazarus & Folkman, 1984). Essentially, a Problem-Focused

coping style manages the stressor directly and is typically used in situations where the child feels some sense of self-efficacy to control or manage the situation. An Emotion-Focused coping style, on the other hand, attempts to manage stressful events by regulating emotional distress. This style is typically used when children feel that nothing can be done to directly affect the situation.

As this study utilized the measure developed by Spirito, et al., (1988), the nomenclature of Active and Passive will be used within this discussion. Essentially, an Active coping style involves either integrating the traumatic experience into their identity or actively discharging affect; whereas a Passive style involves internal mental processes to avoid the thoughts and feelings associated with the traumatic experience (Roth & Cohen, 1986).

Beyond the Active and Passive categorization, there are innumerable subdivisions. For example, Spirito, et al. (1988), described ten different coping techniques which underlie the Active and Passive styles. In their nomenclature, an Active coping style included the techniques of cognitive restructuring, blaming others, problem solving, emotional regulation, and social support; and a Passive style included distraction, social withdrawal, self-criticism, wishful thinking, and resignation. Other coping techniques include being avoidant, self-destructive, constructive, internalized, and angry (Chaffin, Wherry & Dykman, 1997; Roth & Cohen, 1986; Spaccarelli, 1994).

Overall, the purpose of delineating various coping styles is to determine which developmental and trauma-related factors predict their use and which coping styles are associated with better adjustment after a trauma. The research in these areas is sparse. This is likely because of the complex interaction of not only the traumatic event itself, but also the

within person and environmental factors impacting trauma victims. However, one study has suggested that Active or Social coping is associated with less severe sexual abuse; Avoidant coping with greater social support; Internalized coping with lower cognitive abilities and negative reactions from others; and Angry coping with more severe sexual abuse and older age (Chaffin, et al., 1997). Other studies have suggested that Avoidant coping is associated with an increased risk for psychological difficulties among survivors of sexual abuse (Johnson & Kenkel, 1991; Leitenberg, Greenwald, & Cado, 1992) and that Support Seeking can protect children from subsequent difficulties (Conte & Schuerman, 1987).

Within the two main categories of Active and Passive coping, a Passive style has been found to be more effective over the short-term, whereas a more Active coping style relates to better long-term adjustment as reported retrospectively by adults (Mullen & Suls, 1982). Overall, Avoidant coping, where the child or adolescent attempts to actively deny or avoid the occurrence of the traumatic event, is related to more significant subsequent symptomology as reported retrospectively by adults (Leitenberg, et al., 1992); however, one study did find that children who used Avoidant coping had fewer parent-reported behavior problems (Chaffin, et al., 1997). Angry or Self-Destructive coping has also been associated with significant subsequent parent-reported difficulties (Chaffin, et al., 1997; Runtz & Schallo, 1997). In addition, while Active or Social coping has generally been associated with positive outcomes, this finding is not consistent (Chaffin, et al., 1997; Tremblay, Herbert, & Piche., 1999). It is always important to consider the fit between the coping style, contextual variables (e.g., within person and environmental factors) and the situation. For example, when adults tend to a more Avoidant coping style, they may actually have more difficulties if provided with a great deal of psychoeducation regarding their trauma (Miller & Mangan,

1983). Overall, the literature is quite unclear on the role that coping plays as a mediating variable in the relationship between child sexual abuse and subsequent mental health difficulties, and the findings depend largely on how coping is conceptualized and the way in which symptomology is evaluated.

Study 1

The Trauma Symptom Checklist for Young Children (TSCYC) is a relatively new assessment tool and the final validation study and publication of normative data was only recently completed (Briere, 2005). To that effect, Study 1 consisted of two broad goals. The first was to evaluate the internal consistency of the TSCYC. Currently, the only published evaluation of its psychometric properties is the initial development of the measure and the professional manual; however, the measure is being used extensively, and has been used widely even before the final validation work was published (Breier, 2004; Briere, 2005). For example, many of the 54 member centers of the National Child Traumatic Stress Network, which provide treatment to traumatized children, include the TSCYC as part of their standard initial assessment battery. Therefore, this study evaluated the measures reliability with the current sample of children who were sexually abused.

The second goal of Study 1 was to better understand the inter-correlation of the Trauma Symptom Checklist for Children (TSCC), a self-report measure, with the TSCYC, a caretaker-report measure, and the convergent validity of the TSCYC. As discussed above, any evaluation of children should include both self-report information from the children themselves and information from their caretakers. Consequently, one of the primary reasons for developing the TSCYC was to facilitate a multi-informant assessment. The TSCC and TSCYC should not correlate perfectly. A high correlation would indicate that the second

assessment tool is contributing little additional information beyond what was gathered from the children themselves. Consequently, it is necessary to understand how the TSCC and TSCYC correlate, as well as the convergent validity between the TSCYC and other caretaker-report measures, to allow clinicians to interpret the results accurately.

The following goals and hypotheses were offered for Study 1:

1.) Reliability: A reliability analysis was conducted to evaluate the internal consistency of the TSCYC clinical subscales. Internal consistency measures the degree to which a set of items measures the same construct (Nunnally & Bernstein, 1994). The initial evaluation of the TSCYC reported by the measure's author indicated that the internal consistency of the subscales ranged from .78 to .92 (Briere, 2005). It was expected that the internal consistency would be comparable to that reported by the author.

2.) Inter-reporter Correlation: Although the TSCC and the TSCYC attempt to measure the same constructs, due to two different informants (i.e., self-report and caretaker-report) it was anticipated that there would be only moderate correlations between the two measures.

3.) Convergent Validity: Convergent validity assesses the degree of association between two measurement tools that purport to measure similar constructs (Nunnally & Bernstein, 1994). The convergent validity between the TSCYC, Child Behavior Checklist (Achenbach, 1991; Achenbach & Rescorla, 2001; CBCL), and Child Sexual Behavior Inventory (Friedrich, 1997; CSBI) were evaluated. It was hypothesized that the correlations among these three measures would be strong and also that these correlations would be stronger than the correlations between the TSCC and TSCYC.

Method

Participants

The data for this study were collected as part of ongoing treatment programs at the Children's Advocacy Services of Greater St. Louis (CASGSL). CASGSL provides treatment to children who have been sexually abused. Referrals for treatment were made from victim assistance programs, child protective services, local agencies, therapists, and through self-referral. There must be substantiated reports of sexual abuse by protective services before treatment referrals were accepted. Additionally, the child had to disclose or acknowledge sexual abuse in order to participate in services. Before beginning treatment, children and their caretakers completed an extensive treatment intake process, which included the completion of several psychological assessment tools. All children and their caretakers participate in this intake assessment prior to beginning treatment at CASGSL as the primary goal for the intake assessment is to inform and guide treatment; however, the children's legal guardian had the option to opt out of having their information included in the research database and separate informed consents were obtained for research purposes. Unfortunately, the percentage of caretakers who refused to allow the intake assessment data to be included in the research database was not available. CASGSL received IRB approval to gather the intake data for research purposes, and specific IRB approval was obtained to use the database for this project. All measures utilized in this study were administered during this treatment intake process. Those intake assessment measures relevant to this study are discussed further below.

The CASGSL Intake Database consisted of all the intake data from all children and adolescents who were accepted for treatment and whose guardians consented to their

inclusion in the database for research purposes. The sample used for the internal consistency analyses was determined by filtering the database for all cases where the children were between the age of 3 and 12 (i.e., the age range specified by the measure's author) and whose caretaker had completed the TSCYC. This sample consisted of a total of 308 participants, of which 190 were female, and there was an average age of 7.3 years (SD = 2.7). The racial/ethnic breakdown of the children in this sample was as follows: African-American-117, Asian-American-2, Caucasian-159, Latino-2, and Other Racial/Ethnic Background-28. Finally, 108 of the caretakers who completed the TSCYC were the children's biological or adoptive parent. The remaining caretakers had the following relationships to the children: foster parent-6; DFS caseworker-4; step-parent-4; other adult relative-6; other not-related adult-11; and in 139 of the cases the relationship between the child and the caretaker was unknown (Table 1).

The sample for the inter-rater correlation and the convergent validity analyses was further restricted from the above sample by limiting the age range to 8-12 (i.e., the overlapping age range of the TSCC and TSCYC), and to those cases in which all required measures were completed (i.e., TSCC, TSCYC, CBCL, and CSBI). The sample that resulted after filtering for these criteria consisted of 135 children and their caretakers. Of this sample, 93 of the children were female and the average age of the children was 9.8 years (SD = 1.4). Of this group, 60 were African-American, 65 were Caucasian, 1 was Latino, and 9 were of other racial/ethnic backgrounds. The relationships between the children and their caretakers were as follows: biological/adoptive parent – 102; foster parent – 5; DFS caseworker – 4; step-parent – 4; other adult relative – 6; other not-related adult – 11; and relationship unknown – 2 (Table 1).

Measures

Trauma Symptom Checklist for Young Children. The Trauma Symptom Checklist for Young Children (TSCYC) was developed to complement the TSCC by assessing a caretaker's report of a child's symptoms (Briere, 2005). It is completed by caretakers to assess trauma-related symptoms in children age 3 to 12. It is a 90-item measure, and each item is rated on a 4-point Likert type scale (1-not at all; 4-very often). The measure includes two validity scales (response level – under-report and atypical response – over-report) and eight clinical scales (Post Traumatic Stress (PTS)-Intrusion, PTS-Avoidance, PTS-Arousal, Sexual Concerns, Dissociation, Anxiety, Depression, and Anger/Aggression).

The internal consistency of the clinical scales was generally high (α=.78-.92), the Response Level subscale coefficient alpha was .80, and the Atypical Response subscale coefficient alpha was .93 (Briere, 2005). However, the internal consistency of the Atypical Response subscale was significantly lower in the validation sample (α=.36). The author suggests that this consistency was lower because of a restricted score range among the clinical population, which is typical of such samples. A validity analysis found that the three subscales assessing PTSD symptoms were most strongly associated with child maltreatment, including sexual abuse, physical abuse, and witnessing domestic violence (Briere et al., 2001). The Sexual Concerns subscale was also associated with a history of sexual abuse (r=.35), and the Dissociation subscale was associated with physical abuse (r=.31).

Trauma Symptom Checklist for Children. The Trauma Symptom Checklist for Children (TSCC) is a self-report measure of post-traumatic stress and related psychological symptoms (Briere, 1996). It can be completed by both male and female children from age 8 to 17; however, the normative data on the anger subscale is limited to age 16. It is a 54-item

measure and each item is rated on a 4-point Likert-type scale (0-never; 3-almost all the time). The measure includes two validity scales (under-response and hyper-response) and six clinical scales (anxiety, depression, anger, dissociation, sexual concerns, and posttraumatic stress).

Normative data for the TSCC were collected from over 3,000 children from non-clinical populations, and the sample included 27% African-American and 22% Hispanic children. Internal consistency of the TSCC was generally high (.82 to .89), except for the sexual concerns subscale (.77) and the hyper-response validity scale (.66) (Briere, 1996). Convergent validity has been determined by finding significant inter-correlations among the TSCC, and subscales of the CBCL and the Children's Depression Inventory (Briere, 1996). In addition, the TSCC has been found to be sensitive to the effects of therapy with abused children (Lanktree & Briere, 1996). The TSCC has been used extensively since its publication and has been found to be a valid assessment of a child's psychological symptoms associated with a traumatic event (see Briere, 1996; Fricker & Smith, 2001; Sadowski & Frierdrich, 2000).

Child Behavior Checklist. The Child Behavior Checklist (CBCL; Achenbach, 1991; Achenbach & Rescorla, 2001) is a 113-item instrument designed to obtain information about a child's competencies and behavioral/emotional problems in a standardized format. The measure takes approximately 25 to 30 minutes to complete. Parents rate how true each statement is now or within the past six months on a three-point Likert-type scale: 0-not true, 1-somewhat or sometimes true, 2-very true or often true. The CBCL includes eight subscales: Anxious/Depressed, Withdrawn/Depressed, Attention Problems, Social Problems, Somatic Complaints, Thought Problems, Aggressive Behavior, and Rule-Breaking Behavior.

In addition, the CBCL includes three composite scales: Internalizing, Externalizing, and Total Problems.

Normative data for the CBCL was collected from 2,368 non-handicapped children age 4 to 18 and was representative of children in the 48 contiguous states with respect to SES, ethnicity, region, and urban/suburban/rural residence (Achenbach, 1991). None of the children in the normative sample had received mental health services or special services at school for the 12 months preceding the assessment. The test-retest reliability (7-day) was found to range from .65 to .89. The internal consistency of the CBCL ranged from .54 to .93. The psychometric properties of the CBCL have been studied extensively and it has been found to be a reliable and valid indicator of a child's current functioning.

In 2001, a new version of the CBCL was published (Achenbach & Rescorla, 2001). The new version involved publication of updated normative data, modifying the age range from 4-18 to 6-18, and changing six of the items. The clinical subscales of the new version were essentially unchanged and found to be relatively comparable. The correlation between the old and new clinical subscales was found to range between .87 and 1.00. The measure's authors concluded that "most children would obtain approximately the same percentiles and T scores on most scales" (Achenbach & Rescorla, 2001, p. 168). After the publication of the updated version of the CBCL, the assessment packet administered during the intake process was slightly changed to replace CBCL with the updated version. Therefore, the CASGSL dataset includes some cases where children were administered the 1991 version and others were administered the 2001 version.

Child Sexualized Behavior Inventory. The Child Sexualized Behavior Inventory (CSBI; Friedrich, 1997) is a 38-item instrument designed to provide an assessment of sexual

behavior in children between the ages of 2 and 12. The measure takes approximately 10 to 13 minutes for parents or caretakers to complete. Parents rate how frequently behaviors occur on a four-point Likert-type scale: 0-never, 1-less than once a month, 2-one to three times a month, and 3-at least once a week. The CSBI assesses nine domains of sexualized behavior: boundary issues, sexual interest, exhibitionism, sexual intrusiveness, gender role behavior, sexual knowledge, self-stimulation, voyeuristic behavior, and sexual anxiety.

Normative data for the CSBI was collected from 1,114 children from a wide range of socioeconomic backgrounds in the general population and 512 children from child abuse centers (Friedrich, 1997). The internal consistency of the CSBI was found to be .72 among the normative sample and .92 among the sexual abuse sample (Friedrich et al, 1997). The two-week test-retest correlation was .91 and the correlation between mother and father ratings was .79 (Friedrich et al., 1997). When comparing a group of children who had been sexually abused with a group who did not have any reported abuse history, CSBI scores were found to be significantly different after controlling for age, sex, maternal education, and family income (Friedrich et al., 1992).

Procedure

Initial screenings were conducted over the phone with the child's caretaker to insure that the children met inclusion criteria (i.e., had experienced substantiated abuse, the child acknowledged the trauma, and a parent or caretaker was willing to participate in treatment). At CASGSL, one masters-level clinician was responsible for completing the initial treatment assessment, including the administration of all symptom checklists, with clients and their caretakers prior to beginning treatment.

Results & Discussion

The first goal of Study 1 was to evaluate the internal consistency of the TSCYC. The results of this internal consistency analysis and the internal consistency cited by the measure's author based on the standardization sample are included in Table 2 (Briere, 2005). Overall, the internal consistency of the TSCYC when administered to the CASGSL sample is high and is comparable to that of the standardization sample. The one notable difference is that the internal consistency of the Atypical Response subscale is somewhat lower in the CASGSL sample than in the standardization sample. The Atypical Response subscale does not attempt to identify an underlying construct, but instead attempts to identify a tendency to endorse items that occur rarely among the general population (e.g., temporary blindness or paralysis). The fact that the internal consistency of this subscale is lower with the CASGSL clinical population than it is with the standardization sample of the general population is consistent with the purpose of this subscale. There will be more variability on the Atypical Response subscale among clinical populations than with the general population and the decreased internal consistency reflects this phenomenon.

The second goal of this study was to evaluate the inter-reported correlations between the self-report TSCC and caretaker-report TSCYC subscales and the convergent validity of the TSCYC with other caretaker-report measures of children's symptoms. Descriptive statistics for the TSCC and TSCYC clinical subscales are reported in Table 3. A cursory examination of this descriptive data reveals that, with the exception of the Sexual Concerns subscales, caretakers appear to typically report that the children have more difficulties than the children themselves report. The bivariate correlations between the TSCC and TSCYC subscales are as follows (statistical significance in parentheses): Response Level/Underresponse .13 ($p = .12$); Atypical Response/Hyperresponse .05 ($p = .59$); PTS

Total -.04 (p = .67); Sexual Concerns .14 (p = .10); Anxiety .14 (p = .11); Depression .17 (p = .05); Dissociation -.01 (p = .90); and Anger/Aggression .21 (p = .02). Overall, the correlation between caretaker- and self-reported symptoms is quite low, with Anger/Aggression symptoms being the only area that correlates significantly. These findings are consistent with the data reported in the TSCYC manual (Briere, 2005). Previous studies have suggested that caretakers are more accurate reporters of external behaviors such as anger and aggressive, and have more difficulty accurately reporting on the internal affective states of their children (Achenbach, 1991; Achenbach, et al., 1987).

In addition, because of the discordance between self- and caretaker-reported symptomology, the data also were assessed to determine if inter-reporter agreement is influenced by the length of the relationship between the caretaker and child or the amount of time they spend together in an average week (not including time spent sleeping). In this analysis, the difference between the corresponding TSCC and TSCYC subscale T-scores were computed (e.g., TSCC Sexual Concerns – TSCYC Sexual Concerns = Sexual Concerns Difference Score). The Difference Scores were then correlated with the caretakers' report of how long they had known the child and how much time they spend together in an average week (Table 4). These correlations, reported in Table 4, were quite weak and were not statistically significant. These findings are discussed in more detail below.

In order to assess convergent validity, the bivariate correlations between the TSCYC, CBCL, and CSBI subscales were calculated. The results from these analyses are included in Table 5. Almost all correlations among the TSCYC, CBCL, and CSBI subscales are statistically significant. Even subscales which should not intuitively correlate, such as CSBI Total and TSCYC Anger/Aggression, show significant correlations. Sexual abuse has been

related to subsequent symptomology in the areas of PTSD, depression, anxiety, dissociation, sexualized behavior, and anger/aggression. Therefore, this finding likely relates to the global impact of child sexual abuse, and the strong correlations among the three measures' subscales indicate good convergent validity for the TSCYC.

Overall, the correlations between the respective TSCC and TSCYC subscales are quite low; however, the TSCYC does correlate strongly with other caretaker-report symptom checklists. These findings are consistent with previous research which suggests that caretakers and children report different levels of symptomology (Achenbach, 1991; Achenbach, et al., 1987). Therefore, any work with children in middle childhood should involve multiple sources of information. Children may not have the meta-cognitive abilities to report symptoms or they may deny aggressive behaviors which could get them in trouble, and caretakers are not able to observe internal affective states or they may misattribute outward behaviors to an incorrect affective state (e.g., attribute irritability to anger instead of depression). Therefore, these findings further support the importance of using a multi-informant method when assessing middle childhood children in order to develop a complete picture of their functioning.

Study 2

The purpose of Study 2 was to better understand the relationship between various coping styles and the difficulties children experience, and to see if these relationships are different depending on who reports the difficulties, the children themselves or their caretakers. This study was important because coping has been proposed as a mediating variable in the relationship between sexual abuse and subsequent symptomology; therefore, coping can be a focus of therapeutic interventions. To date, many of the studies which

attempted to understand the role of coping strategies with subsequent symptom development have done so only retrospectively with adult survivors of sexual abuse (Leitenberg, et al., 1992). The few studies which have evaluated coping among children typically assessed either caretaker- or self-reported symptomology and did not examine coping from a multi-informant perspective. Only one study evaluated coping in light of both caretaker- and self-reported symptomology; however this study was completed prior to the development of the TSCC and TSCYC and, consequently, used a variety of different measures in an attempt to obtain a complete picture of symptoms from both perspectives (Chaffin, et al., 1997). This piecemeal assessment procedure caused it to be more difficult to make comparisons between informants and also left open the possibility that measurement artifacts from comparing many different assessment tools could have influenced the results.

With the development of the TSCC and the TSCYC, there are finally comparable caretaker- and self-report symptom checklists to assess trauma-related symptomology. As Study 1 determined, the symptoms reported by caretakers and the children themselves with these measures are quite different. Therefore, it was hypothesized that the relationship between coping and symptomology would also be different depending on who was reporting the symptoms. Specifically, it was hypothesized that, as internalized coping has previously been found to be related to more affective symptomology, it was expected that the relationship between this coping style and trauma-related difficulties would be stronger for self-reported symptomology. Conversely, as caretakers tend to be more accurate reporters of externalized behaviors, trauma-outcomes for children who use angry coping was expected to be more significant with caretaker-reported symptomology.

Method

Participants

Study 2 participants were selected from the same CASGSL Intake Dataset that was used in Study 1. The participants for this study were selected by filtering the Intake Dataset to select those cases of children who are between the ages of 8 and 12, the overlap age range for the TSCC and TSCYC, and who have completed the three measures used in this study (i.e., TSCYC, TSCC, and KIDCOPE).

A total of 98 children were included in this study. Seventy-one were females and the participants had an average age of 9.8 (SD=1.4). Forty-nine of the children were African-American, 44 were Caucasian, 1 was Latino, and 4 were of other racial/ethnic backgrounds. The relationship between the children and their caretaker who completed the TSCYC was as follows: biological/adoptive parent-74, foster parent-3, DFS caseworker-1, step-parent-3, other adult relative-6, and other not-related adult-11 (Table 1).

Instruments

In addition to the TSCYC and TSCC discussed above, the following instrument was also utilized in Study 2:

KIDCOPE. The KIDCOPE (Spirito, et al., 1988) is a 15-item questionnaire developed to assess the coping strategies of children between the ages of 7 and 12. This measure was originally designed to assess the coping strategies of children in pediatric populations. Consequently, the standard administration was slightly modified to instruct children to report coping strategies specifically associated with sexual abuse. The KIDCOPE was designed to assess ten common cognitive and behavioral coping techniques: distraction, social withdrawal, cognitive restructuring, self-criticism, blaming others, problem solving, emotional regulation, wishful thinking, social support, and resignation (Spirito, Stark, Grace,

& Stamoulis, 1991). On this measure, children are first asked whether or not they use a given coping strategy. For those coping strategies that are used, they are then asked if the strategy helped "not at all," "a little," or "a lot." The measure's authors reported that this instrument has adequate temporal stability over 3, 7, 14, and 70 days and adequate concurrent validity (Spirito, et al., 1988).

Originally, the ten types of coping techniques were collapsed into two broad categories: Active and Passive (Spirito, et al., 1988). Active coping techniques included cognitive restructuring, blaming others, problem solving, emotional regulation, and social support, and those Passive techniques included distraction, social withdrawal, self-criticism, wishful thinking, and resignation. However, a subsequent factor analysis of the KIDCOPE found that coping strategies better fit into a four factor model (Chaffin, et al., 1997). These factors were labeled avoidant coping (five items), internalized coping (four items), angry coping (two items), and active/social coping (three items). In this model, the coping strategy "I wished I could make things different" did not adequately fit within the four factor structure. This study looked at the relationship between coping and subsequent symptomology using both approaches.

Procedure

Study 2 utilizes the same data collection procedures as Study 1. Please see above for detailed information.

Results & Discussion

Multiple regression analyses were first conducted to determine if demographic variables, such as age, gender, race/ethnicity, and relationship of the caretaker to the child, differentially impact the TSCYC and TSCC clinical subscales. These analyses were

conducted with hierarchical multiple regressions. The race/ethnicity and relationship of the caretaker to the child variables were coded as dummy variables. Age and gender were entered in the first step of the hierarchical regression, the race/ethnicity dummy variables were entered in the second step, and the dummy variables for the relationship of the caretaker to the child were entered in the third step. The results from these analyses are presented in Tables 6.1 to 6.12. Age was found to be significantly related to the TSCYC Sexual Concerns subscale, race/ethnicity was significantly related to TSCYC Anxiety, and gender was found to be significantly related to the TSCYC Sexual Concerns, TSCYC Depression, TSCYC Anger/Aggression, and TSCC Sexual Concerns subscales. Overall, there are not any demographic variables which consistently, differentially impact the TSCYC and TSCC clinical subscales. Therefore, it was not necessary to partial out the effects of any demographic variables in subsequent analyses.

As discussed previously, the items in the KIDCOPE can be organized into two models of coping styles. The first is the two factor model of coping, Active and Passive coping styles, and the second is the four factor model which includes Avoidant, Internalized, Active/Social, and Angry coping styles. The primary goal of Study 2 is to understand the relationship between coping styles among children age eight to twelve who were sexually abused and subsequent symptomology as reported by both the children themselves and their caretakers, and to understand if these relationships are different depending on who is reporting the symptoms. To that effect, multivariate analyses of variance (MANOVA) were conducted using both of the coping models. For each model, the effectiveness score of a given coping style (i.e., how effective a child reports the coping style to be for him or her) was used as the predictor variable. Each effectiveness variable was divided at the scale's

midpoint, and children were categorized as reporting either high or low effectiveness for that coping style. The criterion variables were the TSCYC and TSCC clinical subscales (i.e., PTSD, Depression, Anxiety, Anger/Aggression, Sexual Concerns, and Dissociation).

When the Passive coping scale was divided into high and low effectiveness, only three cases fell above the scale's midpoint. The decision was made to keep the partition at the scale's midpoint for two reasons. First, this decision was made a priori to the analyses. Therefore, changing the partition after discovering that the cases divide unevenly would be inappropriate. Second, the decision of partitioning at the scale's midpoint was made for theoretical reasons which remain valid. The possible responses for the KIDCOPE are that the individual coping techniques are "not at all effective," "a little effective," and "a lot effective." Therefore, with the partition at the scale's midpoint, children who are classified as reporting "High Effectiveness" for Passive Coping are those who are actually reporting that they find Passive coping techniques to be an effective way of dealing with their sexual abuse. In addition, because the sample used here only represents children who were referred for treatment and not a random sample of sexually abused children, it is impossible to know if the sample itself naturally skews towards children who do not find Passive coping to be effective because of sampling bias, which would make partitioning at the sample's mean or median inappropriate. Ideally, future research will provide the field with normative data regarding how children cope with sexual abuse. However, given the present data and the truncated sample of children who report that Passive Coping is highly effective, any findings regarding high effectiveness Passive coping were reported as anecdotal information only.

An analysis using the two factor model, Active and Passive, was first completed and the results from the MANOVA are reported in Table 7.1. Both main effects were found to be

statistically significant: Effectiveness of Active Coping Wilks's $F(12, 83) = 2.26$, $p < .05$ and Effectiveness of Passive Coping Wilks's $F(12, 83) = 2.16$, $p < .05$. Each accounted for 25% and 24% of the variance in subsequent symptomology, respectively. The interaction of Active and Passive coping styles was not statistically significant, Wilks's $F(12, 83) = 1.59$, $p = .11$ and accounted for 19% of the variance. In order for a MANOVA to be considered valid, three assumptions must be met: independence, multivariate normality, and equality of variance-covariance matrices. The assumption of independence is met because the scores from any one participant are independent from the scores for all other participants. In addition, the assumption of multivariate normality is met because of the relatively large sample size and the fact that raw scores were converted to T-scores also helps to maintain normality. Finally, the Box's Test of Equality of Covariance Matrices was not significant, $F(78, 13050) = 1.16$, $p = .16$, which indicates that the assumption of equality of variance-covariance matrices has been met.

The means and standard deviations for the TSCYC and TSCC subscale T scores as a function of the effectiveness of Active and Passive coping styles are reported in Table 7.2. Individual analyses of variance (ANOVA) were then completed for each TSCYC and TSCC subscales to test between-subject effects (see Table 7.3 & Table 7.4). These post-hoc ANOVAs indicated that, for the most part, caretaker-reported symptomology is not significantly related to coping styles. The one exception was on the TSCYC Sexual Concerns subscale, $F(1, 94) = 4.11$, $p < .05$; $\eta^2 = .04$. With this subscale, children in middle childhood who reported that Active coping is effective for them have more caretaker-reported sexual concerns. This may be because children who use more of an Active coping

style are more social with peers and have more opportunity to engage in problematic sexual behavior.

Several of the post hoc ANOVAs found that both Passive coping and the interaction between Active and Passive coping were significantly related to self-reported difficulties among children age eight to twelve. However, when these ANOVAs were examined in more detail, the findings indicated that it was the children who reported that Passive coping was highly effective were also reporting having more difficulties on the self-report TSCC. Due to the truncated sample size, it is not appropriate to interpret this as a statistically significance difference; however, it is interesting to note that reporting that Passive coping is an effective way to deal with sexual abuse is quite rare among a sample of children referred for treatment and also that those children appear to report experiencing a high level of trauma. This anecdotal finding will be discussed further below.

The same types of analyses were then completed using the four factor model of coping (i.e., Avoidant, Internalized, Active/Social, and Angry). The results of the MANOVA main effects and interaction effects are reported in Table 8.1. Only the main effects for Active/Social coping and Angry coping were statistically significant, $F(12, 73) = 2.40$, $p < .05$ and $F(12, 73) = 2.45$, $p < .01$, respectively. Active/Social coping accounted for 28% of the variance and Angry coping for 29%. The interaction between the two coping styles was also significant, $F(12, 73) = 2.33$, $p < .05$, and accounted for 28% of the variance. The means and standard deviations for the TSCYC and TSCC subscale scores as a function of the four coping styles is reported in Table 8.2.

Post-hoc ANOVAs were completed for each TSCYC and TSCC subscale and these results are reported in Tables 8.3 and 8.4. Whereas the Active/Passive coping model was

related to self-reported symptomology, but not to caretaker-reported symptomology, the patterns and relationships for the four factor coping model are not as clear as those for the Active/Passive model. Children in middle childhood who report high effectiveness Angry coping experience more caretaker-reported PTSD symptoms, Anxiety, and Sexual Concerns, and have more self-reported Anxiety. With regard to Active/Social coping, high effectiveness is associated with more caretaker-reported Anxiety, whereas low effectiveness is associated with more self-reported Anger symptoms. In addition, children who report high effectiveness with Internalized coping also self-report more Anger symptoms, but low effectiveness Internalized coping is associated with more caretaker-reported Anxiety symptoms.

Although the MANOVA interaction between Angry and Active/Social coping was significant, only one of the ANOVAs testing this interaction was statistically significant. The combination of low effectiveness Active/Social coping and high effectiveness Angry coping is associated with the most self-reported Dissociation. In addition, the interaction of reporting high effectiveness for both Angry and Active/Social coping is associated with low levels of self-reported Dissociation. There is also an interesting pattern of interaction between Internalized coping and Active/Social coping with regard to self-reported symptomology. High effectiveness Internalized coping and low effectiveness Active/Social coping is associated with more self-reported difficulties with PTSD, Anger, and Sexual Concerns; however, self-reported Anxiety is associated with the reverse pattern – low effectiveness Internalized coping and high effectiveness Active/Social coping.

Although several interactions were found to be statistically significant among the ANOVAs testing caretaker-reported symptoms, only one series of the interactions revealed

any consistent pattern. The interaction between low effectiveness Avoidant coping and high effectiveness Internalized coping is significantly related to caretakers reporting lower levels of symptoms in the areas of PTSD, Anxiety, and Dissociation. The implications of these patterns and an attempt to understand the findings of both coping models together will be discussed further below.

General Discussion

Until recently, a multi-informant system of standardized assessment tools to evaluate trauma-related symptomology did not exist. With the development of the TSCYC, it is finally possible to evaluate trauma-related symptoms from both caretaker- and self-report perspectives. Previous research has found that caretakers are more accurate reporters of children's behaviors and children themselves are more accurate reporters of their internal affective states (Achenbach, et al., 1987). Therefore, a multi-informant assessment procedure is necessary in order to obtain an accurate and complete picture of a child's functioning.

The results of Study 1 indicate that the TSCYC has good internal consistency and these findings further support its strong psychometric properties. The second goal of Study 1 was to better understand the relationship between the caretaker-report TSCYC and the self-report TSCC. The subscales of the two measures correlate very poorly (-.01 to .21); however, the TSCYC does correlate with other caretaker-report measures of children's symptomology (i.e., CBCL and CSBI). As the TSCYC appears to have good concurrent validity, the lack of correlation between the TSCYC and TSCC is more likely to reflect the inherent lack of agreement between self- and caretaker-report measures (Achenbach, et al., 1987).

The lack of concordance between self-reported symptoms with the TSCC and caretaker-reported symptoms with the TSCYC may exist for many reasons. The trauma-related symptoms assessed by these measures ask reporters about a variety of both internal affective symptoms and external behavioral symptoms. Therefore, part of the discordance may be accounted for by the fact that caretakers are typically more accurate reporters of external behavior, whereas children themselves are more accurate reporters of internal affective states (Achenbach, McConaughy, & Howell, 1987). In addition, factors such as social desirability, children's desire to protect their caretakers, and children's undeveloped verbal, memory, and/or cognitive abilities have also been linked to discordance between symptom reports (Grills & Ollendick, 2003). The relationship between children's age and the inter-rater correlation has been inconsistent. Some studies have found that age is not a factor, whereas others have found better agreement between caretakers and adolescents' self-report (Grills & Ollendick, 2003). As the children assessed in this study were between the ages of eight and twelve, the discordance may also reflect this age effect.

The method by which symptoms are assessed also influences the concordance (Janssens, De Bruyn, Manders, & Scholte, 2005). For example, the order in which questions are asked, the wording, and the assessment method (e.g., symptom checklist, structured interview, etc.) have all been found to influence the inter-reporter correlation. As such, the discordance between reporters may also reflect an artifact of the measurement tools themselves.

The lack of any significant inter-rater correlation may also relate to difficulties the caretakers themselves are having or may reflect difficulties in the relationship between the caretakers and the children. There is more inconsistency between caretaker- and self-reports

when the caretakers are experiencing emotional problems or themselves have been traumatized (Grills & Ollendick, 2002). In addition, conflict within families can relate to difficulties with communication or lead to caretakers who are too overwhelmed themselves to notice symptoms in their children (Grills & Ollendick, 2002). A close evaluation of family dynamics and caretaker symptomology was beyond the scope of this study; however, this study did find that simply the amount of contact between caretakers and children, conceptualized both as how long they have lived together and how much time spent together during an average week, was not found to be related to higher levels of concordance between the reporters. Overall, this pattern of results suggests that the relationship between caretaker- and self-reported symptomology is quite complex and certainly an area which warrants continued study. However, these results also suggest that continuing with multi-informant assessment procedures for both research and clinical purposes remains necessary.

While the TSCC and TSCYC correlate poorly, the TSCYC correlates highly with other symptom checklists of caretaker-reported symptomology (i.e., CBCL and CSBI). Even subscales which should not intuitively correlate show a strong concordance (e.g., the Child Sexual Behavior Inventory Total Scale and the TSCYC Anger/Aggression Scale). The strong concordance among caretaker-report symptom checklists may reflect several different phenomena. First, these relationships may reflect the fact that children in middle childhood who are sexually abused experience symptoms in a variety of areas (Kendall-Tackett et al., 1993). This concordance could also be related to the fact that caretakers often struggle themselves after their children are sexually abused and that depression among the caregivers is related to a lack of sensitivity to the children's symptoms (Grills & Ollendick, 2002). Finally, the strong correlations may be related to the fact that the sample is relatively

homogeneous. The children who were included in this study were from a relatively narrow age range, eight to twelve years old, and were all referred for treatment, most likely because their caretakers were concerned with how the children were functioning. Essentially, the concordance among the subscales may reflect the caretakers' version of a "cry for help" for their children.

Almost all mental health work with children, will inherently involve a caretaker, and ideally, this involvement will begin with the assessment process (Kazdin & Weisz, 1998). However, previous research as well as this current study indicates that caretakers and children will have very different perspectives on how the children are functioning (Achenbach, et al., 1987). Therefore, it is important to know how the multi-informant information fits together in order for clinicians to develop coherent case conceptualizations. Clinicians will also need to be able to explain any discrepancies among reporters to other involved parties (e.g., teachers, caseworkers, court systems, etc.). There may also be occasions were information from a caretaker is not available, such as when a child is newly placed in a residential treatment facility. By understanding the types of information received by different informants, clinicians may be able to better understand what information is missing and how that could impact their understanding of a child's functioning.

The other goal of this project was to better understand the relationship between children's coping styles during middle childhood and their mental health difficulties subsequent to child sexual abuse. Coping has been a popular area of research because variability in coping could be an important predictor variable of subsequent difficulties (Friedrich, 1988; Hartman & Burgess, 1989). To date, research in this area has yielded inconsistent results (Spaccarelli, 1994). The inconsistent pattern of results likely relates to

the numerous ways in which coping has been conceptualized and mental health outcomes have been assessed. For example, studies have evaluated mental health outcomes with numerous different assessment tools, by self-report, caretaker-report, and therapist-report, as well as through behavioral observations.

While there may be many ways of assessing mental health outcomes, there at least has to be a coherent framework for understanding symptom areas such as PTSD and depression. Coping, on the other hand, continues to be a very muddled area of research. Not only are there many different assessment tools, there is also no agreement for how to conceptualize the myriad ways in which children cope (Chaffin, et al., 1997; Roth & Cohen, 1986; Spaccarelli, 1994; Spirito, et al., 1989). Numerous different coping styles are referred to within the literature, and even studies which use the same terms may define them in different ways. Overall, the study of how children cope with sexual abuse is in its preliminary stages, but nonetheless, it remains an important area where understanding is needed if the field is to come to an agreement on the conceptualization of coping.

Even the measure which was used to assess coping as part of this current project resulted in two different ways for coping to be conceptualized (Spirito, et al., 1988; Chaffin, et al., 1997). The measure originally proposed that the items load on a two factor model of coping (i.e., Active and Passive); however a subsequent factor analyses suggested that the items better fit a four factor model (i.e., Avoidant, Internalized, Active/Social, and Angry). Therefore, Study 2 sought to evaluate the relationship between each of these models of coping with mental health outcomes subsequent to child sexual abuse. What was unique about this study was that this was the first time it was possible to use a multi-informant system to assess trauma-related symptoms from both self- and caretaker-report perspectives.

Study 2 hypothesized that the relationship between coping and symptomology would be different depending on who was reporting the symptoms. It was thought that Internalized coping would be related to more self-reported affective symptomology and that difficulties with anger, aggression, and sexual behavior would be associated more with Angry coping. A summary of the results from Study 2 are presented in Table 9.

Overall, self-reported difficulties are present when middle childhood children report low effectiveness with Active (two factor model) and Active/Social (four factor model) coping, high effectiveness Internalizing coping, and high effectiveness Angry coping. With the exception of Angry coping, all coping styles associated with increased self-reported difficulties reflect more internal ways of coping with sexual abuse, which would not be observable to the children's caretakers. However, even though the coping styles are more internal, children report difficulties with both internal affective symptoms and external behavior problems. Conversely, when caretakers observe that children in middle childhood are having difficulties coping with sexual abuse, those children are reporting that Angry, Active/Social, and Active coping styles are effective and that Internalizing coping is not effective. This pattern is essentially the opposite of what is seen with self-reported symptoms. When children use coping styles that are external and visible to their caretakers, their caretakers associate this coping with increased symptomology in the areas of Anxiety, PTSD symptoms, and Sexual Concerns, but children are not reporting these same difficulties.

Given previous findings that caretakers are more accurate reporters of their children's behaviors, it is interesting that the symptoms they associate with more external coping styles are internalizing symptom clusters (Achenbach, et al., 1987). In addition, even with coping styles which are more typically thought of as "positive," such as Active/Social coping,

parents associate these coping behaviors with symptoms such as Anxiety and Sexual Concerns. The previous studies comparing self- and caretaker-reported symptomology would indicate that the caretakers' report of Sexual Concerns is likely more accurate than their report of Anxiety, particularly since middle childhood children themselves are not also reporting Anxiety symptoms. However, it is difficult to know, based on the current results, if the caretakers' report of Anxiety symptoms reflects their misattribution of behaviors to affective states or if the children themselves are not reporting their Anxiety symptoms for some reason.

Another interesting pattern arose with regard to sexual behavior problems. Caretakers reported that children who find Active coping to be effective have more Sexual Concerns, whereas self-reported Sexual Concerns are related to Passive coping. This finding may be related to the difference between children reporting having problems with sexualized thoughts and caretakers reporting problems with their children's sexualized behaviors; however, a further understanding is not possible within the current study and will need to be investigated with future research.

Overall, this study suggests that caretakers have difficulties picking up on the distress in children age eight to twelve who keep all their coping on the inside. Essentially, these caretakers appear to be missing their children's distress because they are not coping in visible ways. However, they are noticing the difficulties among children who cope in observable ways, even if these ways are typically thought of as more healthy ways to cope such as Active and Active/Social coping (Chaffin, et al., 1997). In addition, although the coping styles caretakers observe appear to be more external, the symptoms they report observing in the children include both externalizing symptoms (i.e., anger and sexual concerns) and

internalizing symptoms (i.e., anxiety and PTSD symptoms). It is also noticeable that, with the exception of Angry coping and associated anxiety difficulties, there is little overlap between the caretaker-reported patterns and those reported by the children themselves. This finding is consistent with previous studies which have found little correlation between caretaker- and self-reported symptoms among children (Achenbach, et al., 1987).

Avoidant coping, the remaining coping style of the four factor model, was not associated with any increase in either self- or caretaker-reported trauma-related symptoms. This finding is unusual given that previous research has suggested that Avoidant coping has been associated with an increased risk of psychological symptoms as reported by female adolescent victims of incest and adult female survivors of sexual abuse (Johnson & Kenkel, 1991; Leitenberg, et al., 1992). However, given the lack of standardized terminology in the field with regard to coping, Avoidant coping, as conceptualized in this study may be very different that the previous studies. Within the four factor model, Avoidant coping is considered separately from an Internalizing coping style. In this framework, Avoidant coping is more of a behavioral coping style, whereas Internalizing coping is more emotional/cognitive based. Interestingly, the interaction of children finding Internalizing coping to be effective, but not Active/Social coping, is associated with children reporting difficulties in the areas of PTSD, anger, and sexual concerns. This interaction may actually be more similar to the way that the earlier studies conceptualized Avoidant coping.

Overall, the results of this study strongly support the need to use a multi-informant perspective when working with middle childhood children in either a clinical or research setting. It is clear that caretakers and the children themselves have very different viewpoints

of the children's functioning and that both have important contributions to make to the assessment process.

This research also brings to light the need to develop a coherent and consistent framework for understanding coping styles. It will be nearly impossible for the field to come to some comprehensive understanding of the role of coping if every study and each assessment tool uses a different conceptualization of coping.

Whenever children receive mental health services a caretaker should be involved (Kazdin & Weisz, 1998). Not only are the caretakers involvement necessary for the successful treatment of children, their different perspective is also needed in order to develop a complete conceptualization of what is going on with the children. It will also be important to educate both parties on what the other is reporting. The caretakers may be picking up on important behaviors and problems to address in treatment; therefore, it will be necessary to explain that to the children prior to beginning that work. However, it will also be important to inform caretakers of the discrepancies in the assessment process and the clinicians understanding of conflicting assessment data. Caretakers may not be able to see how children in middle childhood are coping or the affective difficulties they are experiencing. If clinicians do not bring caretakers into the assessment and case conceptualization process, they may prematurely withdraw their children from treatment simply because they lack understanding of the difficulties they are experiencing.

It may be important to consider screening all traumatized children to mental health difficulties. These findings suggest that caretakers may not be able to pick up on many of the problems their children may be having. If it is left to the caretakers to decide when and if

their children need treatment, there may be many children who fall though the cracks and are not brought in for treatment they may need.

One of the primary limitations of this study is that the data was cross-sectional and collected prior to the initiation of treatment. As discussed above, the use of various coping styles is related to a child's developmental level, overall adjustment, and previous history (Peterson, 1989). For example, a particular coping technique may impact subsequent symptom development or abatement and, consequently, that technique may change over time. Another limitation of this study is that it evaluated the ability of coping to predict difficulties associated with child sexual abuse; however, coping has actually been conceptualized to be a mediating variable in the relationship between child sexual abuse mental health difficulties (Spaccarelli, 1994). Coping has also been conceptualized as having a bi-directional relationship with sexual abuse and mental health difficulties; they ways that children cope may change over time in relation to subsequent trauma and/or changes in their mental health functioning. Therefore, future research should attempt to understand coping in its position as a mediating variable and to attempt to evaluate how coping changes over time.

The measure used to assess the children's coping style also presents some limitations. The KIDCOPE was initially developed as a research tool for use with pediatric populations. Consequently, in the present study, the directions were modified to instruct children to consider how they cope with sexual abuse instead of medical problems. Ideally, a coping measure would exist that was developed specifically for use with sexual abuse. In addition, clinical norms for use with children who are sexually abused were not available which makes it more difficult to interpret the findings. The technique of partitioning the coping scales at their midpoint also reduces the amount of variability present. As such, a future direction to

continue this type of research could be to use more sophisticated statistical analyses such as structural equation modeling with larger samples.

Any study of how middle childhood children cope with sexual abuse, particularly among populations referred for treatment, is inherently confounded by the issue of avoidance. Avoidance is one of the three symptom clusters of PTSD and also is quite similar to Passive and Internalized coping. Children develop avoidance symptoms because it is one way they can cope with the trauma; however, while the avoidance part of PTSD can help them to avoid trauma reminders, it can also cause other problems (Fletcher, 1996). For example, a child may want to avoid riding in cars if that is where they were abused, but it will likely be quite difficult to avoid cars. Therefore, children who are highly avoidant may also be utilizing Passive and Internalizing coping techniques. Some children may even be so "successful" with their avoidance, that they may never be referred for services. Essentially, the three children in this sample who were categorized as reporting that Passive coping was highly effective could be using Passive coping "successfully." They use Passive coping and also reported a significant amount of emotional distress, but their caretakers' report indicated that they were not noticing a similar level of distress in their children. It may be possible that finding Passive coping to be effective is a relatively rare phenomenon; however, it may also be that children between the ages of eight and twelve who use Passive coping are simply not referred for treatment by their caretakers because they do not see them as having any problems. Therefore, future research in this area should evaluate the coping styles of wider population of sexually abused children and not just those referred for treatment.

In addition, the participants in this study were those who were referred for treatment. Given that a significant number of child sexual abuse cases go unreported, a sample of

children who were referred for treatment may not be representative of the general population of children who have been sexually abused (Finkelhor, et al., 1989).

In conclusion, this research indicates that children in middle childhood and their caretakers have very different views of a child's mental health functioning subsequent to sexual abuse and any work involving children should use a multi-informant assessment process. These findings also indicate that children who cope in more internal ways, which are not visible to their caretakers, experience symptomology in a wide range of areas and that the difficulties they are reporting are not things that their caretakers are picking up on. On the other hand, when children cope with sexual abuse in ways that are visible, such as with Angry or Active/Social coping, and they report better adjustment, their caretakers are reporting that they see more increased mental health problems in their children.

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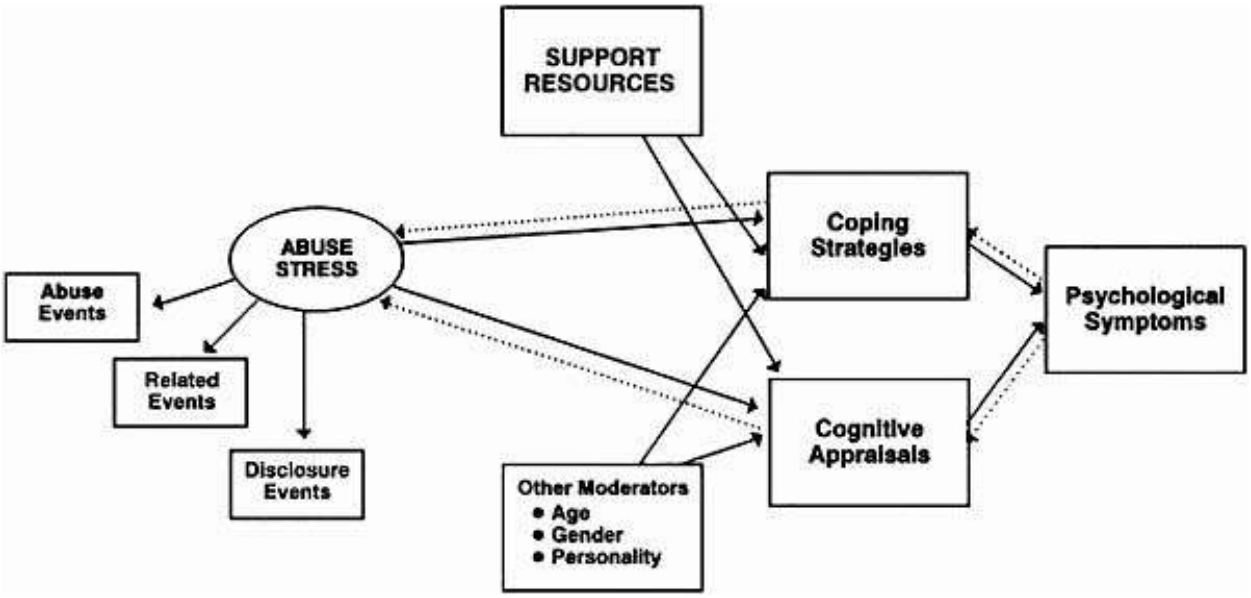
Figure 1

Transactional/Structural Model for Understanding Sexual Abuse Outcomes

(Spaccarelli, 1994)



* Dashed and solid lines indicate bidirectional influence.

Table 1

Demographic Information for Study 1 and Study 2

	Study 1 – Internal Consistency	Study 1 – Inter-Rater Correlation & Convergent Validity	Study 2
Total Sample	308	135	98
Gender			
Females	190	93	71
Males	118	42	27
Age (in years)			
Mean (SD)	7.3 (2.7)	9.8 (1.4)	9.8 (1.4)
Range	3 – 12	8 – 12	8 – 12
Ethnicity			
African American	117	60	49
Asian American	2	---	---
Caucasian	159	65	44
Latino	2	1	1
Other	28	9	4
Caretaker Relationship			
Bio/Adoptive Parent	108	102	74
Foster Parent	6	5	3
DFS Caseworker	4	4	1
Step-Parent	4	4	3
Other Relative	6	6	6
Other Not-Related	11	11	11
Unknown	139	2	---

Note. SD = Standard Deviation

Table 2

Coefficient Alpha Reliabilities of the TSCYC Scales for the CASGSL and Standardization Samples

Scale	α	
	CASGSL Sample[a]	Standardization Sample[b]
Validity		
Response Level (RL)	.73	.80
Atypical Response (ATR)	.60	.93
Clinical		
Anxiety (ANX)	.84	.78
Depression (DEP)	.83	.84
Anger/Aggression (ANG)	.92	.89
Posttraumatic Stress – Intrusion (PTS-I)	.87	.85
Posttraumatic Stress – Avoidance (PTS-AV)	.84	.87
Posttraumatic Stress – Arousal (PTS-AR)	.85	.82
Posttraumatic Stress – Total (PTS-TOT)	.93	.92
Dissociation (DIS)	.91	.90
Sexual Concerns	.80	.85

Note. TSCYC = Trauma Symptom Checklist for Young Children; CASGSL = Children's Advocacy Services of Greater St. Louis. Standardization sample as cited in Briere, 2005.

[a]N = 308. [b]N = 750

Table 3

Descriptive Statistics for TSCC and TSCYC Clinical Subscales (N = 135)

	Mean	Standard Deviation	Percentage Clinical Significant
TSCC Posttraumatic Stress	54.0	11.2	21%
TSCC Depression	51.4	12.1	14%
TSCC Anxiety	53.2	12.1	17%
TSCC Anger/Aggression	49.2	11.7	13%
TSCC Dissociation	52.3	12.1	12%
TSCC Sexual Concerns	60.7	18.2	33%
TSCYC Posttraumatic Stress	65.8	17.1	47%
TSCYC Depression	63.2	16.2	39%
TSCYC Anxiety	58.2	16.1	33%
TSCYC Anger/Aggression	58.3	15.4	31%
TSCYC Dissociation	57.5	14.4	27%
TSCYC Sexual Concerns	60.6	18.3	34%

Note. Percentage Clinical Significance refers to the percentage of the sample which falls within the clinically significant range (T-score at or above 65). TSCC = Trauma Symptom Checklist for Children; TSCYC = Trauma Symptom Checklist for Young Children.

Table 4

Bivariate Correlations between TSCC and TSCYC Clinical Subscale Difference Scores and Amount of Time Child and Caretaker Spend Together (N = 135)

Difference between TSCC & TSCYC Clinical Subscale T-scores	Number of Hours Together Each Week	Number of Months Lived Together
Posttraumatic Stress Difference Score	.13	-.09
Depression Difference Score	.13	.02
Anxiety Difference Score	.05	-.01
Anger/Aggression Difference Score	-.01	.04
Dissociation Difference Score	.19	-.19
Sexual Concerns Difference Score	.10	-.05

Note. TSCC = Trauma Symptom Checklist for Children; TSCYC = Trauma Symptom Checklist for Young Children.

Table 5

Convergent Validity: Bivariate Correlations among the TSCYS Clinical Subscales, Child Behavior Checklist Subscales, and Child Sexualized Behavior Inventory (N = 135)

Subscales	TSCYC PTS Total	TSCYC Sexual Concerns	TSCYC Anxiety	TSCYC Depression	TSCYC Dissociation	TSCYC Anger/ Aggression
CBCL Withdrawal	.47***	.22*	.37***	.62***	.43***	.41***
CBCL Anxiety/Depression	.55**	.26**	.60***	.63***	.40***	.41***
CBCL Somatic Concerns	.27***	.15	.40***	.35***	.22**	.17
CBCL Social Problems	.35***	.22*	.34***	.50***	.40***	58***
CBCL Thought Problems	.47***	.44***	.50***	.41***	.46***	.48***
CBCL Attention Problems	.44***	.20*	.36***	41***	.56***	.52***
CBCL Rule-Breaking	.22**	.37***	.32***	.27***	.32***	.56***
CBCL Aggression	.30***	.31***	.30***	42***	.34***	.81***
CBCL Internalizing	.55***	.24**	.58***	.65***	.45***	.39***
CBCL Externalizing	.28***	.35***	.34***	.39***	.40***	.74***
CBCL Total Problems	.51***	.37***	.52***	.59***	.50***	.65***
CSBI Total	.24**	.51***	.26**	.28***	.19*	.44***
CSBI Sex-Abuse Specific	.18*	.42***	.20*	.22*	.11	.36***

Note. TSCYC = Trauma Symptom Checklist for Young Children; CBCL = Child Behavior Checklist; CSBI = Child Sexualized Behavior Inventory.

* $p < .05$; **$p < .01$; ***$p < .00$

Table 6.1

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Posttraumatic Stress – Total Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.06	.06*
Age	-2.17	1.14	-.19		
Gender	6.96	3.64	.19		
Step 2				.14	.08*
Race/Ethnicity	---	---	---		
Step 3				.21	.07
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 2.34$, $p = .02$.

*$p < .05$

Table 6.2

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Sexual Concerns Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.07	.07
Age	-2.32	1.14	-.20*		
Gender	7.83	3.64	.22*		
Step 2				.83	.01
Race/Ethnicity	---	---	---		
Step 3				.16	.08
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 1.69$, $p = .10$.

*$p < .05$

Table 6.3

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Anxiety Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.03	.03
Age	-1.54	1.12	-.14		
Gender	4.18	3.58	.12		
Step 2				.11	.08*
Race/Ethnicity	---	---	---		
Step 3				.21	.10
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 2.34$, $p = .02$.

*$p < .05$

Table 6.4

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Depression Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.07	.07*
Age	-1.10	1.04	-.11		
Gender	8.41	3.31	.26*		
Step 2				.17	.10*
Race/Ethnicity	---	---	---		
Step 3				.23	.09
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 2.95$, $p = .003$.

*$p < .05$

Table 6.5

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Dissociation Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.02	.02
Age	-.83	1.09	-.08		
Gender	4.09	3.47	.12		
Step 2				.03	.01
Race/Ethnicity	---	---	---		
Step 3				.05	.02
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = .45$, $p = .92$.

*$p < .05$

Table 6.6

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCYC Anger/Aggression Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.07	.07*
Age	-.07	1.13	-.01		
Gender	9.83	3.60	.27**		
Step 2				.12	.05
Race/Ethnicity	---	---	---		
Step 3				.18	.06
Caretaker	---	---	---		

Note. TSCYC = Trauma Symptom Checklist for Young Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 1.94$, $p = .05$.

*$p < .05$; **$p < .01$

Table 6.7

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Posttraumatic Stress Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.01	.01
Age	-.13	.78	-.02		
Gender	1.73	2.50	.07		
Step 2				.04	.03
Race/Ethnicity	---	---	---		
Step 3				.15	.11
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 1.49$, $p = .16$.

*$p < .05$

Table 6.8

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Sexual Concerns – Total Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.07	.07*
Age	.80	1.33	.06		
Gender	10.81	4.25	.26*		
Step 2				.10	.03
Race/Ethnicity	---	---	---		
Step 3				.23	.13*
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 2.61$, $p = .008$.

*$p < .05$

Table 6.9

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Anxiety Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.02	.02
Age	.08	.92	.01		
Gender	3.46	2.94	.12		
Step 2				.02	.01
Race/Ethnicity	---	---	---		
Step 3				.19	.17*
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 2.00$, $p = .04$.

*$p < .05$

Table 6.10

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Depression Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.01	.01
Age	.77	.91	.09		
Gender	1.41	2.92	.05		
Step 2				.03	.01
Race/Ethnicity	---	---	---		
Step 3				.09	.07
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = .90$, $p = .54$.

*$p < .05$

Table 6.11

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Dissociation – Total Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.01	.01
Age	.89	.89	.10		
Gender	-.59	2.82	-.02		
Step 2				.02	.01
Race/Ethnicity	---	---	---		
Step 3				.09	.08
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = .90$, $p = .53$.

*$p < .05$

Table 6.12

Hierarchical Regression Analysis for the Relationship between Demographic Variables and TSCC Anger/Aggression Subscale (N = 98)

Variable	B	SEB	β	R^2	ΔR^2
Step 1				.04	.04
Age	1.48	.82	.19		
Gender	1.70	2.60	.07		
Step 2				.08	.03
Race/Ethnicity	---	---	---		
Step 3				.15	.07
Caretaker	---	---	---		

Note. TSCC = Trauma Symptom Checklist for Children; Age = age of the child; Gender = gender of the child; Race/Ethnicity = race/ethnicity of the child; Caretaker = relationship of the caretaker to the child. Race/Ethnicity and Caretaker variables were coded as dummy variables and entered as a group in Step 2 and Step 3, respectively. Therefore, B, SEB, and β are not available for those variables. Overall model $F(10, 87) = 1.51$, $p = .15$.

*$p < .05$

Table 7.1

Multivariate Analyses of Variance for TSCYC and TSCC Subscales with the Effectiveness of Active and Passive Coping as the Predictor Variable (N = 98).

Source	Wilks's F[a]	Partial η^2
Effectiveness of Active Coping	2.26*	.25
Effectiveness of Passive Coping[b]	2.19*	.24
Interaction of Active and Passive Coping	1.59	.19

Note. Box's Test of Equality of Covariance Matrices $F(78, 13050) = 1.16$, $p = .16$.

[a] Multivariate $df = 12, 83$.

[b] These findings should be interpreted with extreme caution due to the truncated sample size.

*$p < .05$

Table 7.2
Means and Standard Deviations for TSCC and TSCYC Subscale T Scores as a Function of the Effectiveness of Active and Passive Coping Styles

	KIDCOPE Effectiveness Scores			
	Active Coping		Passive Coping	
Subscale	Low (n = 64)	High (n = 34)	Low[a] (n = 95)	High[a] (n = 3)
TSCYC PTSD	61.78 (13.58)	65.65 (19.80)	63.96 (16.10)	70.67 (23.59)
TSCYC Depression	62.94 (14.33)	61.56 (15.79)	62.42 (14.89)	63.67 (13.65)
TSCYC Anxiety	55.05 (13.57)	60.71 (18.76)	57.13 (15.68)	53.33 (19.63)
TSCYC Anger	57.23 (15.31)	57.79 (17.91)	57.56 (16.39)	53.33 (4.62)
TSCYC Sexual Concerns	56.45 (12.90)	65.38 (20.29)	59.31 (15.62)	67.33 (36.95)
TSCYC Dissociation	57.34 (15.88)	57.38 (13.78)	57.15 (15.05)	64.00 (19.08)
TSCC PTSD	53.58 (11.55)	51.12 (9.22)	52.41 (10.23)	62.67 (24.58)
TSCC Depression	53.28 (14.14)	46.62 (7.92)	50.66 (12.25)	60.67 (24.99)
TSCC Anxiety	52.48 (12.96)	52.00 (12.66)	51.79 (11.94)	69.00 (28.36)
TSCC Anger	50.86 (11.80)	45.94 (10.29)	48.62 (10.89)	66.00 (19.70)
TSCC Sexual Concerns	61.91 (20.34)	58.59 (16.41)	60.02 (18.27)	84.00 (32.91)
TSCC Dissociation	53.48 (12.81)	49.03 (10.70)	51.42 (11.37)	68.33 (28.10)

Note. Values are: Mean (Standard Deviation). The Effectiveness scores were divided into Low and High categories at the median of the scale. TSCYC = Trauma Symptom Checklist for Young Children; TSCC = Trauma Symptom Checklist for Children.

[a] These findings should be interpreted with extreme caution due to the truncated sample size.

Table 7.3

Univariate Analyses of Variance for TSCYC Subscales with the Effectiveness of Active and Passive Coping as the Predictor Variable (N = 98)

	TSCYC PTSD		TSCYC Depression		TSCYC Anxiety		TSCYC Anger		TSCYC Sexual Concerns		TSCYC Dissociation	
Source	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2
Active (A)	.03	.00	.66	.01	1.34	.25	.02	.00	4.11*	.04	2.44	.03
Passive[b] (P)	.38	.00	.16	.00	.60	.01	.13	.00	.02	.00	1.57	.02
A x P[b]	.27	.00	.48	.01	.35	.00	.06	.00	1.48	.02	2.67	.03

Note. TSCYC = Trauma Symptom Checklist for Young Children. Source – KIDCOPE subscale scores for the effectiveness of Active and Passive coping divided into High/Low categories at the subscales' median.

[a] Univariate $df = 1, 94$.

[b] These findings should be interpreted with extreme caution due to the truncated sample size.

*$p < .05$

Table 7.4

Univariate Analyses of Variance for TSCC Subscales with the Effectiveness of Active and Passive Coping as the Predictor Variable (N = 98)

	TSCC PTSD		TSCC Depression		TSCC Anxiety		TSCC Anger		TSCC Sexual Concerns		TSCC Dissociation	
Source	F[a]	η^2	F[a]	η^2	F[a]	η^2	F[a]	η^2	F[a]	η^2	F[a]	η^2
Active (A)	5.67*	.06	10.05**	.10	4.70*	.05	4.72*	.05	1.92	.02	9.64**	.09
Passive[b] (P)	5.58*	.06	5.76*	.06	8.81**	.09	10.94**	.10	6.39*	.06	11.63**	.11
A x P[b]	4.23*	.04	5.50*	.06	4.56*	.05	1.96	.02	1.15	.01	6.35*	.06

Note. TSCC = Trauma Symptom Checklist for Children. Source – KIDCOPE subscale scores for the effectiveness of Active and Passive coping divided into High/Low categories at the subscales' median.

[a] Univariate $df = 1, 94$.

[b] These findings should be interpreted with extreme caution due to the truncated sample size.

*$p < .05$; **$p < .01$

Table 8.1

Multivariate Analyses of Variance for TSCYC and TSCC Subscales with the Effectiveness of the Four Factor Coping Model as the Predictor Variable (N = 98)

Source	Wilks's F[a]	Partial η^2
Effectiveness of Avoidant Coping	.78	.11
Effectiveness of Internalized Coping	1.22	.17
Effectiveness of Active/Social Coping	2.40*	.28
Effectiveness of Angry Coping	2.46**	.29
Interaction Avoidant X Internalized	1.02	.14
Interaction Avoidant X Active/Social	1.61	.21
Interaction Internalized X Active/Social	1.65	.21
Interaction Avoidant X Angry	.89	.13
Interaction Internalized X Angry	1.29	.18
Interaction Active/Social X Angry	2.33*	.28

Note. Box's Test of Equality of Covariance Matrices $F(156, 4347) = 1.18$, $p = .07$.

[a] Multivariate $df = 12, 73$.

*$p < .05$; **$p < .01$

Table 8.2

Means and Standard Deviations for TSCC and TSCYC Subscale T Scores as a Function of the Effectiveness of Four Factor Coping Model

	KIDCOPE Effectiveness Scores							
	Avoidant Coping		Internalized Coping		Active/Social Coping		Angry Coping	
Subscale	Low (n=52)	High (n=46)	Low (n=85)	High (n=13)	Low (n=51)	High (n=47)	Low (n=78)	High (n=20)
TSCYC PTSD	65.10 (15.89)	63.11 (16.76)	64.80 (15.77)	60.00 (19.29)	62.61 (14.41)	65.85 (18.05)	62.95 (14.98)	68.90 (20.22)
TSCYC Depression	65.31 (14.75)	59.24 (14.31)	63.76 (14.82)	53.92 (11.79)	63.04 (14.95)	52.63 (10.34)	61.90 (14.30)	64.65 (16.75)
TSCYC Anxiety	57.73 (15.84)	56.20 (15.69)	58.04 (15.92)	50.31 (12.80)	54.29 (12.54)	59.96 (18.22)	55.35 (13.96)	63.50 (20.33)
TSCYC Anger	58.58 (16.18)	56.13 (16.24)	58.39 (16.86)	51.15 (8.57)	57.63 (17.54)	57.21 (14.72)	56.91 (15.74)	59.45 (18.04)
TSCYC Sexual Con.	60.02 (14.79)	59.02 (18.05)	59.68 (15.86)	58.69 (19.78)	59.04 (16.13)	60.11 (16.69)	58.18 (14.81)	64.90 (20.81)
TSCYC Dissociation	58.77 (16.82)	55.76 (12.90)	57.72 (15.39)	55.00 (13.43)	57.06 (15.78)	57.68 (14.51)	57.45 (15.10)	57.00 (15.54)
TSCC PTSD	53.54 (10.86)	51.80 (10.81)	52.24 (10.51)	55.92 (12.61)	52.14 (11.17)	53.36 (10.50)	52.35 (10.86)	54.20 (10.80)
TSCC Depression	53.17 (12.66)	48.48 (12.41)	50.96 (12.45)	51.00 (14.82)	51.35 (12.74)	50.55 (12.78)	51.15 (13.47)	50.25 (9.32)
TSCC Anxiety	51.69 (11.64)	53.02 (14.08)	51.72 (12.17)	56.23 (16.33)	50.55 (12.85)	54.23 (12.58)	50.86 (12.32)	58.00 (13.32)
TSCC Anger	50.02 (10.74)	48.17 (12.33)	48.74 (10.67)	51.85 (16.14)	50.12 (11.27)	48.11 (11.75)	48.55 (10.83)	51.50 (13.81)
TSCC Sexual Con.	61.60 (18.80)	59.80 (19.50)	59.84 (18.75)	66.77 (20.71)	59.94 (20.20)	61.64 (17.89)	58.74 (18.60)	68.60 (19.23)
TSCC Dissociation	51.46 (11.03)	52.48 (13.60)	51.31 (11.07)	56.08 (18.29)	50.92 (12.71)	53.04 (11.78)	52.12 (12.43)	51.25 (11.81)

Note. Values are: Mean (Standard Deviation). The Effectiveness scores were divided into Low and High categories at the median of the scale. TSCYC = Trauma Symptom Checklist for Young Children; TSCC = Trauma Symptom Checklist for Children.

Table 8.3

Univariate Analyses of Variance for TSCYC Subscales with the Effectiveness of the Four Factor Coping Model as the Predictor Variable (N = 98)

	TSCYC PTSD		TSCYC Depression		TSCYC Anxiety		TSCYC Anger		TSCYC Sexual Concerns		TSCYC Dissociation	
Source	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2
Avoidant (V)	.01	.00	.14	.00	.29	.00	.10	.00	.00	.00	.03	.00
Internal (I)	2.30	.03	1.81	.02	5.01*	.06	2.51	.03	.10	.00	1.70	.02
Active/ Social (S)	2.01	.02	.10	.00	4.99*	.06	1.14	.01	1.34	.02	.79	.01
Angry (G)	10.37**	.11	2.27	.03	12.31**	.13	1.30	.01	8.40**	.09	1.00	.01
V x I	5.94*	.07	2.80	.03	4.89*	.06	1.84	.02	1.20	.01	4.72*	.05
V x S	.65	.01	1.59	.02	1.48	.02	.00	.00	.58	.01	.66	.01
I x S	5.65*	.06	3.48	.04	2.30	.03	.13	.00	5.26*	.06	1.17	.01
V x G	3.70	.04	2.30	.03	4.90*	.06	3.52	.40	.88	.01	2.01	.02
I x G	6.85*	.08	2.67	.03	3.12	.04	.74	.01	8.50**	.09	.79	.01
S x G	3.00	.03	.03	.00	1.72	.02	2.22	.03	2.12	.03	2.30	.03

Note. TSCYC = Trauma Symptom Checklist for Young Children. Source – KIDCOPE subscale scores for the effectiveness of Avoidant, Internalizing, Active/Social, & Angry coping divided into High/Low categories at the subscales' median.

[a] Univariate $df = 1, 84$.

*$p < .05$; **$p < .01$

Table 8.4

Univariate Analyses of Variance for TSCC Subscales with the Effectiveness of the Four Factor Coping Model as the Predictor Variable (N = 98)

	TSCC PTSD		TSCC Depression		TSCC Anxiety		TSCC Anger		TSCC Sexual Concerns		TSCC Dissociation	
Source	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2	F^a	η^2
Avoidant (V)	1.29	.02	1.31	.02	.43	.01	1.08	.01	.07	.00	.59	.01
Internal (I)	.94	.01	.59	.01	.10	.00	5.02*	.06	1.55	.02	.60	.01
Active/ Social (S)	.13	.00	.40	.01	.00	.00	8.56**	.10	2.31	.03	1.16	.01
Angry (G)	.28	.00	.45	.01	4.66*	.05	.16	.00	1.44	.02	.41	.01
V x I	.50	.01	.00	.00	.91	.01	.60	.01	.14	.00	1.08	.01
V x S	.04	.00	.21	.00	.57	.01	3.06	.04	1.38	.02	.01	.00
I x S	4.02*	.05	1.73	.02	5.62*	.06	6.12*	.07	6.58*	.07	1.10	.01
V x G	1.06	.01	.10	.00	1.38	.02	.08	.00	.17	.00	.00	.00
I x G	.09	.00	.06	.00	.00	.00	1.32	.02	.05	.00	.19	.00
S x G	.80	.01	.17	.00	.00	.00	2.91	.03	1.97	.02	4.34*	.05

Note. TSCC = Trauma Symptom Checklist for Children. Source – KIDCOPE subscale scores for the effectiveness of Avoidant, Internalizing, Active/Social, & Angry coping divided into High/Low categories at the subscales' median.

[a] Univariate $df = 1, 84$.

*$p < .05$; **$p < .01$

Table 9

Summary of the Relationships between the Coping Styles Children find Effective and Trauma-Related Symptomology

KIDCOPE Coping Style Effectiveness	Children's Symptoms as Reported by Caretakers (TSCYC)	Self-Reported Symptom Difficulties (TSCC)
Two Factor Model		
Low Active	---	PTSD, Depression, Anger, Anxiety & Dissociation
High Passive[a]	---	PTSD, Depression, Anger, Anxiety, Dissociation, & Sexual Concerns
Interaction Low Active & High Passive[a]	---	PTSD, Depression, Anger, Anxiety, Dissociation, & Sexual Concerns
High Active	Sexual Concerns	---
Four Factor Model		
High Angry	PTSD, Anxiety, & Sexual Concerns	Anxiety
High Active/Social	Anxiety	---
Low Active/Social	---	Anger
Low Internalizing	Anxiety	---
High Internalizing	---	Anger
Interaction High Internalizing & Low Active/Social	---	PTSD, Anger, & Sexual Concerns

Note. Coping style refers to the children's reported effectiveness for each coping style (e.g., "High Angry" = children who report that they find Angry coping to be an effective way to manage difficulties associated with sexual abuse). TSCYC = Trauma Symptom Checklist for Young Children; TSCC = Trauma Symptom Checklist for Children.

[a] These findings should be interpreted with extreme caution due to the truncated sample size.