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**AN INVESTIGATION OF PSYCHOLOGICAL DISTRESS
AND SELF-DESTRUCTIVE BEHAVIOR
IN ADULT VICTIMS OF CHILDHOOD SEXUAL ABUSE**

By

Susan Christine Wood

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ABSTRACT

AN INVESTIGATION OF PSYCHOLOGICAL DISTRESS

AND SELF-DESTRUCTIVE BEHAVIOR

IN ADULT VICTIMS OF CHILDHOOD SEXUAL ABUSE

By

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The purpose of this study is to determine the differences in psychological distress exhibited between adult victims and nonvictims of childhood sexual abuse, both of which are acting out in a self-destructive manner.

This study investigates the damaging effects that childhood sexual abuse has on its adult victims. The Brief Symptom Inventory (BSI) was used to measure current psychological symptom status and is designed to detect internal distress, often not visible externally. Childhood sexual abuse produces an hyperarousal state which overwhelms the limbic system, leading to developmental dysfunction and restricted cognition. Due to the dysfunctional development produced by childhood sexual abuse, the adaptive modes have difficulty coping with stressful situations. Internalized psychological distress results in impaired coping responses often released by the act of self-destructive behavior. This study suggests that victims of childhood sexual abuse experience more psychological distress of Interpersonal Sensitivity and Positive Symptom Distress Index than nonvictims.

Dedicated to the Staff at Van Buren County Mental Health Crisis Stabilization Center

Acknowledgments

I would like to thank my children; Meaghan Rose, Dallas Leon, and Dakota Suzann, who were my inspiration for choosing such a sensitive topic. They are the ones that gave me the determination and strength to pursue this study of which I hope will make a difference in their lives. I would also like to thank my husband Brian, for his support, commitment and loving encouragement to myself and our family.

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CHAPTER 1

INTRODUCTION

There were several definitions of childhood sexual abuse found in research literature. Weaver, Varvaro, Connors, and Regan-Kubinski (1994) defined childhood sexual abuse as sexual abuse of children by adults, older children, or peers who dominate and control through sexual activity. This paper refers to childhood sexual abuse as any inappropriate sexual contact, ranging from genital exhibitionism and fondling to intercourse, between an adult and a child less than 18 years old in which the child is used for the sexual gratification of the adult (Green, 1993; Dobuwitz, Black, Harrington, & Verschoore, 1993). The intent of this paper is to investigate the effects that childhood sexual abuse has on its victims in their adult years. The term adult victims throughout this paper will refer to adults who were victimized as children.

Adult victims of childhood sexual abuse have a diversity of mental health sequelae due to the altering perceptions, attributions, and coping strategies utilized while the sexual abuse occurred (Mullen, 1993). Powerlessness is a major childhood perception associated with sexual abuse, and is referred to as the decrease in beliefs of competence, control, and confidence (Trickett, & Putnam, 1993). Not only does psychological distress occur in child victims, but the continued distress results in damaging responses which last a lifetime. The difficulty that adult victims of childhood sexual abuse have in maintaining and establishing a relationship, as well as social role incompetence, is simulated in psychological distress and is presented as impaired coping. The powerlessness, that occurs when a child's territory and body space are repeatedly invaded against the child's will, transforms to reflect impaired coping skills in adult victims (Weaver et al., 1994).

Recent research has been aimed at finding the relationships between environmental stressors, physiological responses to stress, and behavioral and psychiatric problems (Teicher, Glod, Surrey, & Swett, 1993; Trickett et al., 1993; Hartman & Burgess, 1993). According to

Hartman and Burgess (1993), childhood sexual abuse is a stressful stimuli which overwhelms the limbic system with incoming information causing numbing, dissociation, denial, or splitting. The term splitting is defined as the active separation of affects of opposite quality, so that one does not contaminate the other. Trickett et al. (1993) found that an increased dissociation may produce attention problems and memory lapses, which is a psychophysiological process. These impaired coping responses are cognitive mechanisms utilized for managing this hyperarousal state.

Since adult victims of childhood sexual abuse have difficulty processing stressful adult life situations, the survival response mechanism which develops is expressed as impaired coping responses. The authors van der Kolk, Perry, and Herman (1991) found a correlation between these survival response mechanisms and the actions of suicide attempts and self-destructive behavior in adult victims of childhood sexual abuse. This survival response mechanism utilized by an adult victim is transformed to psychological distress resulting in impaired coping responses. Psychological distress can be displayed by acting out behaviors or can be a negative, emotional inner arousal state.

Furthermore, Teicher et al. (1993), suggest that intense adverse stimulation during childhood, in the form of sexual abuse, can have profound effects on brain limbic system development. Therefore, the development of an altered brain limbic system generates a tendency toward impaired coping responses which result from psychological distress. Behavior such as impulsivity, aggression, sexual activity, anxiety, and panic are chronic symptoms demonstrated by adult victims of childhood sexual abuse (Apolinsky & Wilcoxon, 1991).

Adult victims of childhood sexual abuse exhibit pathological anxiety, affective disturbances, impulsivity, and dissociative defenses that contribute to considerable psychological distress and suffering (Green, 1993). Research studies and clinical reports have linked childhood sexual abuse to specific forms of adult psychopathology. These include depression with low self-esteem and suicidal behavior, borderline personality disorder, self-mutilation in personality disorders, multiple personality disorder, anxiety disorders, substance abuse, and sexual

dysfunction (Lobel, 1992; Kaverola & Pound, 1993; Green, 1993; Simeon, Stanley, Frances, Mann, Winchel, & Stanley, 1992; van der Kolk, Perry, & Herman, 1991).

It is evident that adult victims of childhood sexual abuse have life-long lasting effects. Medication management as well as psychotherapy related to impaired coping responses may be a crucial periodic intervention required during stressful situations. The authors van der Kolk et al. (1991), found that victims have repeatedly been described as continuing to react with extremes of under and over arousal to even minor stressors. They seem to keep responding to stimuli reminiscent of the trauma with conditioned psychological and biological coping responses that do not extinguish over time. As noted earlier in this paper, psychological distress which forms as a result of ineffective stress management can produce behaviors manifested in psychopathologies.

van der Kolk et al. (1991) believe the work of therapy must clarify how current stresses are experienced as a return of past traumas, and small disruptions in present relationships as repetitions of prior abuse. The dissociative coping response utilized by a child victim results in dysfunctional development. This, in turn, distorts the adult victim's coping ability and leads to ineffectual engagement with the problems and demands of adult life. Ongoing stressful situations that occur throughout a person's life, such as intimate relationships, parenting, work life, and sense of self, can produce a psychological distress which will eventually be manifested in impaired coping responses.

Research indicates that there is mounting internalized psychological distress which is released by the act of self-mutilation (Simeon et al., 1992). If disclosure of these internal distress signals were possible and treatment were initiated, many acting out activities might be prevented. The emotional trauma of childhood sexual abuse leaves the adult victims with unclear boundaries, mounting immobilizing anxiety, depression, guilt, hopelessness, shame, powerlessness, and lack of anger impulse control (van der Kolk et al., 1991). Since adult victims of childhood sexual abuse are forced to live with the effects of this emotional trauma, perceived stress can compound and

intensify psychological distress resulting in impaired coping responses. To intervene before psychological distress is manifested in impaired coping responses would be an ideal nursing intervention. For instance, Simeon et al. (1992) found that mounting anxiety may be either a direct precipitant of self-mutilation or the final common pathway to a variety of thoughts, affects, and experiences that trigger self-destructive behavior.

By effectively detecting the most prevalent patterns of psychological distress and how it is exhibited in impaired coping responses, nurses performing therapy can develop an intervention plan based on the findings. Also, by assessing adult victims of childhood sexual abuse, the mounting internalized psychological distress that is often unavailable to external observers can be diagnosed, resulting in interventions specific for the psychological distress before impaired coping responses are exhibited.

The purpose of this study was to determine the differences in psychological distress exhibited between adult victims and non-victims of childhood sexual abuse, both of whom are acting out in a self-destructive manner.

CHAPTER 2

THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

Conceptual Framework

Roy Adaptation Model

In order to clearly conceptualize how traumatic stimuli can lead to impaired coping responses, the Roy Adaptation Model was analyzed in regards to the study variables of childhood sexual abuse, psychological distress, and self-destructive behavior. Sister Callista Roy's Adaptation Model of Nursing (Roy, 1976) for assessing adaptation versus impaired coping is one conceptual framework for this study. Roy's Adaptation Model is an open adaptive system with responses occurring in regards to a constantly changing environment (Fawcett, 1995). Open systems, according to Roy, engage in interchange with the environment through internal and external stimuli. Roy formulates that the adaptive coping response has the capacity to adjust effectively to changes in the environment, in turn affecting the environment (Fawcett, 1995). Adaptation promotes and maintains integrity and survival of the individual (Roy, 1976). An impaired coping response is one that does not maintain integrity and is disruptive to the individual. Therefore, the process of adaptation can involve higher performance which continually raises the adaptation level, or lowered performance, which leads to impaired coping responses (Fawcett, 1995).

Roy and Roberts (1981) conceptualize the individual as an open adaptive system. Input is received from internal and external stimuli, acting through a cognator and regulator control system, which act within the adaptive level. Coping response is induced by interrelations between

the adaptive modes.

The person's adaptive level portrays a constantly changing point which represents the individual's own standard of the range of stimuli that can be tolerated with ordinary adaptive responses (Roy & Roberts, 1981, p. 43). Roy conceptualized that the adaptive level represents the total effect of system input and provides the variable standard against which the feedback is compared. This, in turn, directs further output of the system. This system consists of a set of parts connected to function as a whole by the interdependence of its parts. The adaptive responses are a result of the system's internal control processes, regulator and cognator, and are manifested through coping responses. The regulator subsystem includes endocrine, chemical, and neural body responses to stimuli. The cognator subsystem includes a learned, information processing center which is influenced by perception, judgment, emotion, knowledge and skill, involving decision making in response to the stimuli (Roy & Roberts, 1981).

According to Roy (1976), input into this open adaptive system occurs in the form of focal, contextual and residual stimuli. The focal stimuli are inputs which immediately confront the person. The contextual stimuli are background inputs that contribute to the behavior as a result of the focal stimuli. Residual stimuli are philosophical attributes unique to the person which involve beliefs, attitudes and past experiences. Therefore, the ability of a person to respond in an adaptive coping response depends on the three types of stimuli and their current effect on the person. This study regards the independent variable, childhood sexual abuse, as being reflective of the focal stimuli. The contextual stimuli are demographic data such as the person's age, mental health diagnosis, age when abuse occurred, and educational preparation. In order to promote clarity and understanding of the effects of childhood sexual abuse (CSA) based on Roy's Adaptation Model (1976), a diagram of the adaptive versus impaired coping has been formulated (see Figure 1).

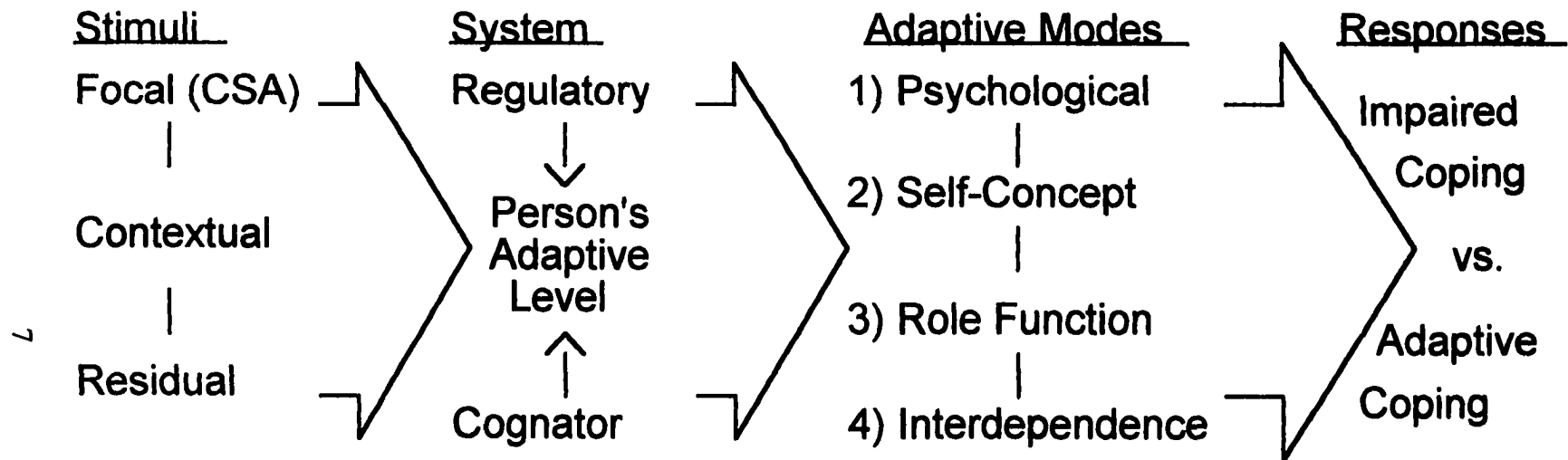


Figure 1. Sister Callista Roy Adaptation Model (1976): Influences of internal/external stimuli, reacting within the person's adaptive level, resulting in adaptive versus impaired coping based on the interaction of the adaptive modes.

Roy (1976) conceptualizes that the adaptive modes are utilized in order to cope with changes in the environment and emit responses in the form of coping behavior. Roy views this coping behavior as having four internal adaptive modes; physiological, self-concept, role function, and interdependence. The physiological mode is directly related to the regulator mechanism and involves physiological functions such as oxygenation, temperature, elimination, activity, nutrition, sleep, and protection. The self-concept mode is directly related to the cognator mechanism and is a composite of beliefs and feelings one holds about oneself formed from the perception or reaction of others. Role function mode is directly related to the cognator mechanism and regulates the performance of duties according to expected behaviors to maintain a status in society. Interdependence is directly related to the cognator mechanism and involves mutual exchange of feelings of security, recognition, praise, and approval in a nurturing relationship (love, respect, value) with significant others and support systems.

Information Processing of Trauma Model

Incorporating Roy's Adaptation Model with an additional theoretical framework that explores the information processing of trauma, a further investigation of the trauma experience and how it becomes a lasting effect is evident. The Information Processing of Trauma Model by Hartman and Burgess (1993) describes a neuropsychosocial model of information processing of trauma that emphasizes the limbic system as being the primary system for coding incoming information. According to Hartman and Burgess (1993):

When the limbic system is overwhelmed by incoming information there is an altering alarm/dissociative process, impeding the development of information processing essential for the discerning of intentionality, personal responsibility (blame), sense of control over events, and trust in others. (p. 56)

The limbic system model stresses the consequences associated with childhood sexual abuse and the psychological distress which those adults display with impaired coping responses. By integrating the Information Processing of Trauma Model (1993) with adaptive versus impaired

coping of Roy's Adaptation Theory (1976), the psychological distress which results from a compromised limbic system leading to the restricted cognitive development is theorized.

The Information Processing of Trauma Model (Hartman & Burgess, 1993) clarifies how the person's adaptive level unsuccessfully manages and responds to the over stimulation of childhood sexual abuse. Merging of the theoretical frameworks at the level of adaptation provides an opportunity for considering the interconnection between excessive adverse stimulation, and the formation of a coping response developed for protection and survival. The adaptive modes develop as a result of the psychological distress which occurs due to the disruption of sensation, perception, and cognition. Therefore, the impaired coping response of self-destructive behavior is the outcome of the person's adaptive levels unsuccessful management of self as a result to the traumatic stimuli (see Figure 2).

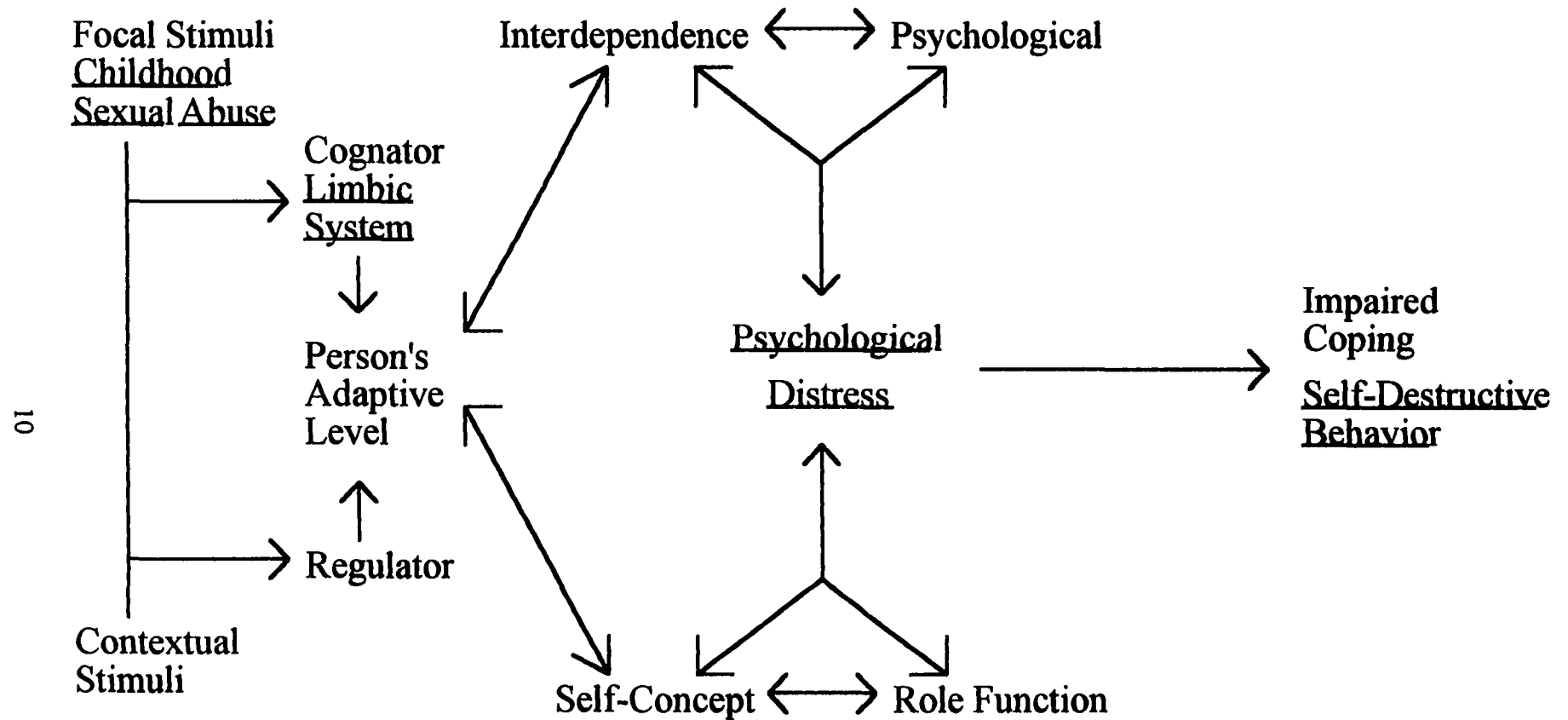


Figure 2. An Integration of Roy Adaptation Model (1976) and Hartman and Burgess Information Processing of Trauma Model (1993). Those components of the Information Processing of Trauma Model are underlined.

This study will examine self-destructive coping responses and the psychological distress which is detectable and measurable by the Brief Symptoms Inventory (BSI - see Appendix A). Hartman and Burgess (1993) emphasize that the limbic system is the primary neurological system for coding incoming information. The output of the limbic system influences basic regulatory processes of eating, sleeping, attachment, affect, sexual behavior, and aggression. According to Hartman and Burgess (1993), when the limbic system is overwhelmed by incoming information the initial alerting response is unsuccessful in managing and responding to the charged information, therefore this incoming information is transferred into the survival response of numbing and dissociation. The major assumption is that "stress" stored in the primitive neural strata can lead to disorganized stereotypic behavior, altered affect, and neuroendocrine changes (Burgess & Hartman, 1993, p. 49). Therefore, psychological distress representative of this "stored stress" can explain the cognitive and behavioral consequences.

Nursing intervention for adult victims of childhood sexual abuse can be directed toward identifying certain psychological distress symptoms. Also, treatment at the level of the adaptive modes may assist in recuperating and maintaining integrity, thereby promoting adaptation.

Review of Literature

Research regarding childhood sexual abuse and its consequences on adult victims has increased within the last ten years. In this study, it is assumed that childhood sexual abuse creates an altering response of the limbic system which produces psychological distress prior to the impaired coping response of self-destructive behavior. Therefore, the literature reviewed will be categorized according to three variables of interest: childhood sexual abuse, psychological distress, and self-destructive behavior.

Childhood Sexual Abuse

The first variable is childhood sexual abuse. This study assumes that the over stimulation that childhood sexual abuse causes, negatively affects one's ability to process incoming stimuli by altering limbic system development. The article published by Hartman and Burgess (1993)

presents a neuropsychosocial model explaining how the limbic system handles over stimulation which occurs in most instances of childhood sexual abuse.

Through the integration of four models which describe the consequences associated with child sexual abuse, the Information Processing of Trauma Model was developed. According to Hartman and Burgess (1993) the four models utilized were: 1) The Psychoanalytic Model assumes the psychological consequence of sexual abuse develops into the victim having deviations of sexual and aggressive behaviors and relationships with others, resulting in a fixation or regression to a level of personality structure. 2) The Child Sexual Abuse Accommodation Syndrome, developed by Summit (1983), explains that the negative consequences of child sexual abuse are related to conceptual shifts the child makes, from initially responding to the protection and nonsexual warmth of the abuser to intensifying the child's sense of shame and responsibility, when demands for secrecy and sexual connotations turn the child against their responses (Hartman & Burgess, 1993). This explains the attachment the child has with the abuser. 3) The Four-Factor-Theory Model developed by Finkelhor and Browne (1985), explains that factors of sexualization, stigmatization, betrayal, and powerlessness are the dynamics resulting from the traumatic impact of child sexual abuse (Hartman & Burgess 1993). 4) The last model is constructed from an associative learning paradigm. Sexual response dysfunction occurs because of the misinterpretation abuse victims have with intimacy. They have associated the offender's physical or psychological aggressive behavior with their personal sexual arousal. These vulnerabilities exhibited by the abuse victim have potential for developing future exploitive situations (Hartman & Burgess, 1993).

Since Hartman and Burgess (1993) summarized that all four of the models assumed some notion of memory, the Information Processing of Trauma Model is concerned with how information is experienced, filtered and related to the process of memory, retrieval, and recall. It stipulates that once the limbic system is overwhelmed by incoming information, there is an alerting response that transfers into numbing and dissociation. The compromised dysregulation of the

limbic system affects eating, sleeping, attachment, affect, sexual behavior, memory, and aggression, all of which the limbic system regulates. According to Hartman and Burgess (1993), experiences are processed on a sensory, perceptual, cognitive and interpersonal level and the effect of memory relates to each of these levels of information processing. It is hypothesized that processing and routing of this hyperarousal state is compromised by the dysregulation in the limbic system. Dissociation results in altering the state of awareness which creates a compromised meaning systems. The processing of fear, aggression, and sexual arousal are impaired as well as a fragmented recollection of the sexually abusive incidents.

Hartman and Burgess (1993) summarized that this altered alarm/dissociative process impedes the development of information processing essential for the discerning of intentionality, personal responsibility (blame), sense of control over events, and trust in others. The result is a restriction in developing cognitively to deal with interpersonal intimacy which heightens the child's aggression and/or avoidance. Also, inhibition and discrimination are altered diminishing the ability to detect danger. Therefore, Hartman and Burgess (1993) emphasized the necessity of treatment reducing this arousal state by holding constant the social/contextual activities that support the healing potential. By lessening the dissociative processes, primary learning directed toward cognitive and physiological interventions can be successful.

Another research article which provides insight into the biological basis for the impaired coping responses of adult victims of childhood sexual abuse is by Teicher, Glod, Surrey, and Swett (1993). The authors investigated the hypothesis that intense adverse stimulation during early development alters the course of limbic system maturation and results in significant neuropsychiatric sequelae. This study suggests that childhood sexual and physical abuse may produce EEG or brain electrical-activity mapping (BEAM) abnormalities which are similar to temporal lobe epilepsy (TLE) via overstimulation of the developing limbic system. Therefore, a self-report scale was developed to detect clinical symptoms often associated with transient temporal lobe electrical abnormalities.

Two hundred and fifty-three outpatients who presented for psychiatric evaluation participated in the study. Their ages ranged from 17 to 69 years. Fifty-eight percent of the sample was female. Most patients had depression or anxiety disorders. A self-report questionnaire, the Limbic System Checklist-33 (LSCL-33), was developed to evaluate the frequency with which patients experienced 33 symptom categories often encountered as ictal TLE phenomena. Data were also collected via self-report measure for history of abuse by using the Life Experience Questionnaire (LEQ). Each subject reported the type of abuse experienced (physical, sexual), age at onset, duration, and perpetrator of the abuse.

Criterion-related validity measures were evaluated by having psychiatric subjects complete two self-report questionnaires: The Dissociative Experience Scale (DES) (Bernstein & Putnam, 1986) and the Hopkins Symptom Checklist (SCL-90) (Derogatis, 1983). The DES is an instrument developed to offer a reliable means of measuring dissociation. Teicher et al. (1993) found that the comparison of overall LSCL-33 score and total DES score resulted in a correlation of 0.81. The comparison of subscale LSCL-33 scores with the total DES score were: somatic, $r = 0.77$; sensory, $r = 0.69$; behavioral, $r = 0.81$; mnemonic, $r = 0.73$. The comparison of the total LSCL-33 scores and the subscales of the SCL-90 scores resulted in a correlation with somatization, $r = 0.65$; and psychoticism, $r = 0.57$. Multiple linear regression indicated that depression, anxiety, and paranoid ideation subscales of the SCL-33 did not add to overall correlation. These results suggest that LSCL-33 scores were elevated in patients with TLE, and moderate to strong correlations emerged between LSCL-33 and DES scores.

Test-retest reliability was conducted utilizing sixteen individuals with different psychiatric diagnoses and backgrounds. The LSCL-33 was completed twice, with an inter-test interval of 7-14 days. The correlation between the two test sessions was high $r = 0.92$, and the slope was close to unity (0.897). The four subscales of the instrument also correlated on retesting: somatic $r = 0.83$; sensory $r = 0.83$; behavioral $r = 0.86$; and mnemonic $r = 0.78$. These correlations were acceptable.

Findings suggested that early abuse may result in biological alterations in the development of the central nervous system. The authors hypothesize that these biological alterations are manifested as persistent behavioral disturbances, such as inability to modulate anger, poor impulse control, limited stress tolerance, episodic aggression toward self and others, and a tendency toward substance abuse, that are in turn associated with long-term psychiatric sequelae. Physical abuse was associated with a 38% increase in LSCL-33 scores ($P < 0.01$), sexual abuse with a 49% increase ($P < 0.02$), and combined abuse with a 113% increase ($P < 0.0001$).

Although this study demonstrated high association between abuse and LSCL-33 scores, a number of limitations existed. First, the LSCL-33 was a new instrument, and further analysis of the validity and reliability of the scale is necessary. Second, the study was purely correlational, therefore no claims regarding a cause-and-effect relationship can be established.

Previous research indicates that a number of conditions of maladaptation are associated with child sexual abuse. The article by Trickett and Putnam (1993) proposes that in order to understand the long-term impact of sexual abuse, it is necessary to investigate how it may interfere with both the psychological and the biological processes of pubertal development. Trickett and Putnam (1993) conceptualized a developmental, psychobiological integration. They hypothesize that there may be directly traceable mechanistic relationships between the impact of sexual abuse on specific psychological and biological developmental processes and some of the adult outcomes of that abuse. According to Trickett and Putman (1993), developmental and personality research suggests that the effects of the trauma associated with childhood sexual abuse are likely to be manifested in feelings of self-worth, beliefs about power and control, beliefs about cognitive and social competence, feelings of depression or negative affect, dissociation, aggressiveness, and sexual acting out.

Trickett and Putnam (1993) also theorize that the stress produced by the trauma of childhood sexual abuse will have physiological effects on the developing child. They conceptualize that sexual abuse is a stressful experience that may produce an activation of the

hypothalamic-pituitary-adrenal (HPA) system and hypothalamic-pituitary-gonadal (HPG) system similar to that found in adolescents who are depressed, have eating disorders, or are physically stressed. Hormonal markers such as cortisol levels, elevated androstenedione levels, decreased levels of luteinizing hormone, decreased testosterone levels, and increased dehydroepiandrosterone have been found by previous research to be indicators of the stress response.

Therefore, the authors concluded that long term and immediate results of sexual abuse occur due to a significant disturbance in hormonal functioning, negatively affecting the development of a satisfactory representation of self, cognition, social competencies, and modulation of negative affect and behavior. Trickett and Putnam (1993) proposed that many symptoms of maladaptation associated with child sexual abuse include anxiety, depression, somatic complaints, low self-esteem, learning disabilities, running away, conduct disorders, delinquency, aggressiveness, substance abuse, self-mutilation, suicidal behavior, and inappropriate sexual behavior. Furthermore, certain types of problem behaviors in adult victims of childhood sexual abuse may be associated with specific hormonal profiles. For example, the authors speculate that sexually abused girls may have patterns of hormonal levels that are associated with high levels of sexual and aggressive behavior. Limitations of this article are that the propositions considered for the basis of this developmental, psychobiological model are speculative and lack directly relevant empirical research.

Psychological Distress

The second variable is psychological distress which this study assumes is detectable in adult victims of childhood sexual abuse. In a study by Lobel (1992) the relationship between childhood sexual abuse and borderline personality disorder in 50 women psychiatric inpatients was examined. An ex post facto, causal-comparative research design was utilized. Of the 50 psychiatric women inpatients, 30 comprised a group sexually abused as children and 20 comprised a group not sexually abused as children. The most common diagnosis for the 50 women was

major depression, with 82% having been given that diagnosis. The mean age of the women was 36 years. To ensure that the two groups of women inpatients were matched demographically, appropriate comparative statistics were calculated on marital status, occupation, income, age, ethnicity, and education level. Results indicated that education level was the only demographic variable that the groups were not adequately matched, $t(48) = 3.03$, $p < .01$.

The tools utilized for Lobel's (1992) study are the Diagnostic Interview for Borderlines (Revised) (DIB-R), the Sexual Abuse Screening Questions (SASQ), and when childhood sexual abuse was reported the Description and Clarification Interview Schedule for Reported Sexual Abuse (DCISRSA) was applied. In order to test the hypothesis that women sexually abused as children would score significantly higher than women not sexually abused as children on all four sections of the DIB-R (Affect, Cognition, Impulse Action Patterns, and Interpersonal Relationships) as well as on the total DIB-R, five independent t tests were conducted. In order to reduce potential error resulting from multiple t tests, two-tailed probabilities were calculated.

The Lobel (1992) result for the Affect section of the DIB-R showed no significant difference between women sexually abused as children and those not sexually abused as children. The remaining sections, as well as the total DIB-R did indicate significant differences: for the Cognition section, $t(48) = -2.63$, $p < .01$; for the Impulse Action Patterns section, $t(48) = -3.03$, $p < .01$; for the Interpersonal Relationships section, $t(48) = -4.15$, $p < .0001$; and for the total DIB-R, $t(48) = -4.69$, $p < .0001$. Therefore, women psychiatric inpatients sexually abused as children displayed a significantly greater degree of borderline pathology than women not sexually abused as children on the total DIB-R score, including sections which measured cognition, impulse action patterns, and interpersonal relationships. Further analysis revealed that 19 (63%) of the 30 women sexually abused as children reported a least one suicide attempt in the last two years, and promiscuity was reported by 14 (47%) of the 30 women. Also, women engaging in unusual sex practices, such as enjoyment from being humiliated or hurt while having sex, were found only in the childhood sexual abuse group.

An unexpected finding was that of the 30 women sexually abused as children, 19 (63%) evidenced eating disorders. A chi-square analysis was performed to compare women with eating disorders versus those without eating disorders against those sexually abused or not sexually abused as children. The resultant chi square equals 3.86, $p < .05$. Therefore, women sexually abused as children were significantly more likely to have eating disorders than those not sexually abused as children. Limitations of the study revolve around the accuracy of the women reporting, with repression of memory or underestimation of occurrences serving to contaminate the findings of this study.

Green (1993) addressed the issues of short and long term psychological sequelae of childhood sexual abuse. The method utilized was a review of more than 100 research studies on child sexual abuse, the majority written from 1980 to present time. Green (1993) found many research articles indicating that adult survivors of childhood sexual abuse have developed long-range defensive adaptation with coping responses such as anxiety attacks and anxiety related symptoms, dissociation and "out-of-body" experiences, depression, low self-esteem, suicidal behavior, substance abuse, Borderline Personality Disorder, Multiple Personality Disorder, and sexual dysfunction. Green (1993) also found many studies indicating that sexually abused girls are at risk for repeated victimization as adults, and a smaller but not insignificant number of them will become child molesters.

One important conclusion that Green (1993) formulated was that prospective, longitudinal follow-up studies of sexually abused children and adolescents would provide a better understanding of the natural course of the child's adaptation to sexual victimization than does retrospective research. Another important point is the author's finding that knowledge about treatment has lagged behind the accumulation of new data regarding the immediate and long-term effects of sexual abuse. Also, because of the difficulty to diagnose childhood sexual abuse with certainty, there should be a way of demonstrating that individuals selected for study as victims of sexual abuse were actually abused. Another limitation is that most existing instruments used for

the mental health assessment of victims of sexual abuse are broad based and have norms for various populations, not designed to study the unique effects of sexual abuse.

Another research article that considers the developmental level at which the abuse occurred is Mullen (1993). This article found that the long-term impact of childhood sexual abuse coincides with the subsequent developmental level. This developmental level in which childhood sexual abuse occurred is manifested many years later when the individual is faced with the demands of adulthood. The resulting defective functioning leaves the adult victim of childhood sexual abuse susceptible to mental health problems.

Mullen, Martin, Anderson, Romans, and Herbison (1994) explored the effects of childhood sexual abuse on adult life. A random sample of 2250 women were sent a postal questionnaire exploring a range of abuse experiences. Due to the number of returned responses and selection criteria, the finale sample consisted of 248 reporting childhood sexual abuse. They were invited for an interview together with an equal number of controls. During the interview a detailed inquiry was made into the childhood sexual abuse and current interpersonal, social and sexual function. A range of problems in adult life were described which the authors believed reflected the continuing effects of childhood sexual abuse. The most common attribution was a fear of men, reported by 49 (22%). A lack of trust which marred their close relationships (with men and women) was described by 41 (18.3%). Damage to their self-esteem and self-confidence occurred in 11 (4.9%). Sexual problems occurred by 44 (19.7%) and six (2.6%) of the women believed they had been promiscuous as adolescents as a consequence of abuse. Continued anger (1.7%) or active hatred (3.6%) directed at the abuser were reported by a number of women, exact number not specified.

Upon examining the association between reporting childhood sexual abuse and the range of social, interpersonal and sexual difficulties in adult life, Mullen et al. (1994) found that the phase in the child's development and the resilience of the child to which sexual abuse occurred is believed to affect several important strands in the overall pattern of the child's development.

Since this study sample indicated that the most common ages to have been abused were between 8 and 12 years, the relation of puberty being a critical phase for personal and social development was made. These authors also examined the women's own opinions of the long-term effects of childhood sexual abuse. The women attributed 58.8 % of their long-term ill effects directly to childhood sexual abuse. This study concluded that it is the developmental disruption, which in most cases, induces the vulnerability to later disorder.

Self-Destructive Behavior

The third variable is self-destructive behavior. According to van der Kolk, Perry, and Herman (1991) histories of childhood physical and sexual abuse are strongly correlated with a variety of self-destructive behavior in adulthood, including suicide attempts and cutting. The van der Kolk et al. study examined how histories of childhood trauma and disruptions in parental caregiving are related to suicide, self-injurious behavior, eating disorders, and dissociation.

Subjects were gathered from clinical settings at Cambridge Hospital, from advertisements in local newspapers, and from the local probation department. Seventy-four subjects (39 women and 35 men) aged 18 to 39 years, with personality or bi-polar II disorder were followed in a longitudinal study, for an average of four years and monitored for self-destructive behavior such as suicide attempts, self-injury, and eating disorders. The impulse-anger checklist was utilized for gathering information about lifetime history of self-destructive ideas and behavior, and was administered by an assistant blind to the diagnoses. Subjects were seen by the research staff approximately every 4-6 months for a follow-up interview. Over a two year span (1986 - 1988), van der Kolk and Herman, whom were blind to all other previously obtained information, interviewed these subjects using the Traumatic Antecedents Questionnaire in order to obtain childhood histories of abuse and disruptions in parental care.

Protocols were scored for the occurrence of three types of childhood trauma: physical abuse, sexual abuse, and witnessing domestic violence. The period at which the childhood trauma occurred was correlated to three developmental stages: early childhood (1-6 years), latency (7-

12), and adolescence (13-18). Data analysis was conducted by means of cross-tabulation and Kendall's tau computation for ordinal data of categorical variables. Also subjects were given the Dissociative Experiences Scale at intake and follow-up which is a self-report measure of experiences with dissociative states. Scores were highly correlated with histories of trauma ($r = 0.38$, $N = 74$, $p < 0.001$). The dissociation score was also significantly associated with intake histories of cutting ($r = 0.28$, $N = 70$, $p = 0.02$) and anorexia ($r = 0.24$, $N = 70$, $p < 0.05$), and there was a trend toward a correlation with suicide attempts ($r = 0.22$, $N = 70$, $p < 0.10$). During follow-up, dissociative scores continued to predict cutting ($r = 0.35$, $N = 74$, $p = 0.003$) and suicide attempts ($r = 0.25$, $N = 74$, $p < 0.05$).

Of the three types of trauma, van der Kolk et al. (1991) found that sexual abuse was most strongly related to all forms of self-destructive behavior. Spearman correlation coefficients were calculated for bivariate relationships, resulting in suicide attempts, $r = 0.41$, $p < 0.001$; cutting, $r = 0.49$, $p < 0.0001$; and total self-injurious behavior, $r = 0.36$, $p < 0.01$. The age at which trauma occurs plays a role in both the severity and expression of self-destructive behavior: the earlier the trauma, the more cutting ($r = 0.41$, $p < 0.001$). Abuse during early childhood and latency was strongly correlated with suicide attempts (early childhood, $r = 0.37$, $p < 0.01$; latency, $r = 0.41$, $p < 0.001$) and total self-injurious behavior (early childhood, $r = 0.31$, $p < 0.01$; latency, $r = 0.29$, $p < 0.01$), while abuse in adolescence was significantly associated only with suicide attempts ($r = 0.33$, $p < 0.01$) and anorexia ($r = 0.23$, $p < 0.05$). Therefore, van der Kolk et al. (1991) suggests that both psychological and biological maturity plays a role in how experiences of abuse are managed. The adult victims of childhood sexual abuse are vulnerable to developing lasting changes in response to this trauma.

Simeon, Stanley, Frances, Mann, Winchel, and Stanley (1992) aimed their study at determining whether self-mutilators with personality disorders differ from nonmutilators with personality disorders in measures of serotonergic function and whether these measures correlate with self-mutilating behavior, aggression, impulsivity, and other associated psychopathology. The

study included 26 self-mutilators with personality disorder and 26 control subjects with personality disorders. Gender, age, education, Axis I diagnosis of affective disorder, and Axis II diagnosis of personality disorder were matched among the groups. The subjects were hospitalized throughout the study. A medical exam and standard laboratory test were performed on all subjects to ensure their ability to participate.

Several measures designed to assess specific areas of psychopathology were administered. Measurement tools such as Hamilton Rating Scale for Depression, Beck Depression Inventory, Beck Hopelessness Scale, MMPI, and Buss-Durkee Hostility and Guilt Inventory were utilized. Areas examined were depression, aggressive behavior, antisocial traits, hostility, and guilt. A Sensation Seeking Scale which measures thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility was also utilized. Biological measures included CSF 5-HIAA levels and number of platelet imipramine binding receptor sites and affinity constant were determined.

The psychological results indicate a significant positive correlation between the degree of self-mutilation and impulsivity within the self-mutilator group ($r = 0.54$, $N = 26$, $p < 0.01$). The degree of self-mutilation was also significantly correlated with inappropriate chronic anger ($r = 0.43$, $N = 26$, $p < 0.05$) and with the somatic anxiety item ($r = 0.46$, $N = 24$, $p < 0.05$). Impulsivity did not differ between self-mutilators and control subjects, but due to the greater aggression when combined with the poor impulse control, self-mutilation resulted ($r = 0.61$, $N = 24$, $p < 0.01$).

The biological results indicated that aggression did not significantly correlate with any of the serotonergic measures in the self-mutilator group (self-mutilators $r = 19.4$, $SD = 9.7$, and nonmutilators $r = 20.2$, $SD = 9.7$). In order to assess the biological factor of imipramine binding, all subjects with histories of suicide attempts from both groups were excluded, due to the possibility of confounding association between serotonin and suicide. The resulting three self-mutilators had mean CSF 5-HIAA levels that were 44% lower than those of the five non-

mutilators. The biological results indicate that serotonergic dysfunction may facilitate self mutilation.

Limitation of the Simeon et al. (1992) study included the relatively small sample size, especially for the biological measures, as well as the low to medium mean frequency of self-mutilation in the subject group. Although Simeon et al. (1992) did not sample childhood sexual abuse victims, the potential biological basis for self-destructive behavior in individuals is an important theoretical concept incorporated in this study. The theoretical concept of the Information Processing of Trauma (Hartman & Burgess, 1993) stresses the neuropsychosocial effects of childhood sexual abuse in which alteration of the limbic system development occurs. Since the results of Simeon et al. (1992) indicates a biological serotonergic dysfunction contributing to self-destructive behavior, a positive correlation to limbic system involvement is a possibility. Subsequent enhancement and understanding of self-destructive behavior from a biological perspective becomes conceivable. The purpose of the Simeon et al. (1992) study was not to test for a specific neurotransmitter indicating self-destructive potential, but only for correlational content.

Summary

Many of the studies support a link between childhood sexual abuse and self-destructive behavior (Kaverola & Pound, 1993; van der Kolk, Perry, & Herman, 1991; Teicher, Glod, Surrey, & Swett, 1992; Lobel, 1992; Trickett & Putnam, 1993; and Green 1993). Studies also support a combination of a neuro-biological-developmental basis for attempting to correlate and explain the lasting effects of childhood sexual abuse on adults coping response, psychological distress and eventual ineffective coping behavior (Hartman & Burgess, 1993; Teicher, Glod, Surrey, & Swett, 1993; Trickett & Putnam, 1993; Mullen, Martin, Anderson, Romans, & Herbison, 1994; and Mullen, 1993).

Limitations consistently found in the literature point to the self-reporting accuracy of the women reporting childhood sexual abuse. Since repression of memory or underestimation of

occurrences may contaminate the findings, problems with validity and reliability are common. Another common problem is in regards to the measurement tools, which usually are broad general assessment instruments not particularly sensitive to many of the symptoms reported in adult survivors of sexual abuse. Also, increasing prospective longitudinal follow-up studies for childhood sexual abuse victims (van der Kolk et al., 1991) may allow for specific documentation over time of its long term effects as well as the coping responses utilized for ineffective coping vs. adaptive coping.

According to the literature reviewed, childhood sexual abuse may have the potential of altering the limbic system, which is the major neural site where excessive stimulation can result in persistent kindled changes in neuronal excitability and behavior (Teicher, et al., 1993). With the alternate neural pathways emerges neurological abnormality which can result behaviorally in impulsivity, loss of memory, blunted emotions, numbing of feelings, anxiety, aggression, and sexual activity (Gilman & Newman, 1992). Dissociation and splitting also occur which serve to separate from conscious awareness thoughts feelings and actions that would otherwise cause anxiety. Therefore, childhood sexual abuse results in a dysfunctional limbic system development, preventing it from reaching full adult capacity and heightening self-distortions in adulthood.

The current study included those persons who exhibited self-destructive behavior. Psychological distress detected by the Brief Symptoms Inventory (BSI) was examined within this population. Two groups consisting of those reporting childhood sexual abuse and those not reporting childhood sexual abuse were examined in relation to the BSI and demographic data retrieved from the comprehensive nursing assessment.

Research Question

The research question to be answered was: What are the differences in psychological distress exhibited between adult victims and non-victims of childhood sexual abuse, both of whom are acting out in a self-destructive manner?

Definition

The key terms to be defined for this study are childhood sexual abuse, psychological distress, and self-destructive behavior.

Childhood sexual abuse is defined as any inappropriate sexual contact, ranging from genital exhibitionism and fondling to intercourse, between an adult and a child less than 18 years old in which the child is used for the sexual gratification of the adult (Green, 1993; Dobuqitz, Black, Harrington, & Verschoore, 1993). Childhood sexual abuse is an external stimuli contributing to internal psychological distress.

Psychological distress is defined as an unconscious process, promoting arousal specific to protection and survival of physical and psychic integrity. It involves an active, internal force within an individual which causes anguish, constraint and affliction of the mind. This process is a result of a defensive reaction to the altered adaptive level.

Self-destructive behavior is defined as self-induced, deliberate, harmful, injurious, or aggressive behavior toward one's own body, exhibiting suicidal ideation and/or behavior, but without a conscious intent to die. Behaviors which demonstrate self-destruction are repeated involvement with danger, such as multiple criminal records for aggressive conduct, recurring suicide attempts, self-mutilation, sexual promiscuity, drug and/or alcohol abuse, and frequent reports of suicidal ideation, involving physical, aggressive behavioral outbursts.

CHAPTER THREE

METHODOLOGY

Research Design

This study used an ex post facto, descriptive-correlational research design. Retrieval of archives covering a three year span at Van Buren County Mental Health (VBCMH) crisis treatment program were used. The archives were records of the clients in the crisis treatment program and include both victims and nonvictims of childhood sexual abuse. There were 60 archives investigated. The victim and nonvictim group consisted of 30 archives each. The archives included a self-report psychological distress symptom inventory (Brief Symptoms Inventory-see Appendix A) and a comprehensive nursing health care assessment. The nursing assessment included demographic data, past history related to crisis, present crisis, psychological evaluation, and duration and nature of childhood sexual abuse (see Appendix B). The use of such a design was appropriate due to the research question.

Advantages of this research design were that it was straightforward, relatively inexpensive, and could be done quickly. Disadvantages of this research design were that a correlation does not indicate causation. Confirming the existence of a correlation was insufficient to proving that a causal relationship existed.

As noted by Green (1993), the definition of the term sexual abuse has affected prevalence rates and outcomes in past research studies. Therefore this study focused on a precise and narrow definition. Another factor which may be a threat to validity is verification of those adults reporting childhood sexual abuse. Since records and reports of actual abuse were nonexistent,

relying on self-report of early childhood memories might have resulted in obtaining false information. The use of a general assessment tool nonspecific for childhood sexual abuse may also have been a threat to validity. Due to many of the unique symptoms reported in adult victims of childhood sexual abuse, these general assessment tools may not have been particularly sensitive to many of the symptoms.

Sample and Setting

Data was retrieved from the archives at the Van Buren County voluntary residential crisis program. Subjects included men and women of Van Buren County encountering a psychological crisis situation which required intervention, treatment and stabilization. Subjects also included men and women discharged from an inpatient hospital setting requiring further stabilization before reintegration into the community. All subjects exhibited some form of self-destructive behavior.

The records were reviewed at the VBCMh Residential Crisis Center. The gender, employment, insurance, race, mental health diagnosis and marital status of the adult childhood sexual abuse victim and nonvictim groups are described in Table 1. The groups had minimal demographic differences between them. The gender distribution among the two groups reflected that the victimized group had a higher percent of females (76.7%) sexually abused than males (23.3%). The nonvictim group reflected an even gender distribution of 50% male and female.

The sample had a variety of mental health diagnoses, which were formulated following the Diagnostic and Statistical Manual for Mental Health Disorders (see Table 2). The diagnosis of depression was the most prevalent for both groups, reflecting a victim frequency of nine (30%) and a nonvictim frequency of 11 (36.7%). The diagnosis of schizophrenia was evenly distributed among the victim and nonvictim groups at five each (16.7%).

Table 1

Description of Victim (N = 30) and Nonvictim (N = 30) Demographics: Gender, Employment, Insurance, Race, and Marital Status

Frequency (%)		
Gender	V - 23 Female (76.7%) N - 15 Female (50 %)	7 Male (23.3 %) 15 Male (50%)
Employment	V - 4 Yes (13.3%) N - 3 Yes (10%)	26 No (86.7%) 27 No (90%)
Insurance	V - 21 Yes (70%) N - 19 Yes (63.3%)	9 No (30%) 11 No (36.7%)
Race	V - 8 African Americans (26.7%) N - 6 African Americans (20%)	22 Caucasians (73.3%) 24 Caucasians (80%)
Marital Status	V - 14 Never Married (46.7%) 5 Married (16.7%) N - 13 Never Married (43.3%) 6 Married (20%)	10 Divorced (33.3%) 1 Widowed (3.3%) 9 Divorced (30%) 2 Widowed (6.7%)

V = Victim; N = Nonvictim

Table 2

Description of Victim (N = 30) and Nonvictim (N = 30) Mental Health Diagnoses

Mental Health Diagnosis	Victim	Nonvictim
Depression	9 (30%)	11 (36.7%)
Schizophrenia	5 (16.7%)	5 (16.7%)
Bipolar	7 (23.3%)	1 (3.3%)
Adjustment Disorder	3 (10%)	4 (13.3%)
Schizoaffective	1 (3.3%)	5 (16.7%)
Borderline	4 (13.3%)	1 (3.3%)
Panic/Anxiety	0 (0%)	N - 2 (6.7%)
PATS	1 (3.3%)	N - 3 (3.3%)

The victim and nonvictim group had similar age and educational levels. The age sexual abuse began ranged from birth to 16 years, with a mean age of 7.45 (SD = 4.86). The age sexual abuse ceased ranged from 4 to 26 years, with a mean age of 12.48 (SD = 4.59). Therefore, the mean age range that childhood sexual abuse occurred was between the ages of 7 and 12 years (see Table 3).

The selection of the adult victim group who were sexually abused as children involved utilizing all the men and women describing any inappropriate sexual contact as recorded in the records. The type of sexual abuse the victim group experienced is described in Table 4. The sexual abuse ranged from fondling, genital exhibitionism, oral contact and intercourse, before the age of 18, which occurred with an adult or older child in which they were used for sexual gratification of the adult. The selection of adult nonvictim subjects involved utilizing only the men and women who were not sexually abused as children. One record did not include the age at which sexual abuse began or ceased, therefore indicating twenty-nine victim subjects.

Table 3

Description of Victim (N = 30) and Nonvictim (N = 30) Age, Level of Education, Age Abuse Began, and Age Abuse Ceased

	Range	Mean	SD
Age	V 18 - 57	34.33	9.52
	N 19 - 53	35.97	9.23
Level of Education	V 4 - 16	11.37	2.43
	N 8 - 16	11.23	1.79
Age Abuse Began (N = 29)	V 0 - 16	7.45	4.86
Age Abuse Ceased (N = 29)	V 4 - 26	12.48	4.59

V = Victim; N = Nonvictim

Table 4

Description of Sexual Abuse Experienced by Victims (N = 30)

Sexual Abuse	Frequency (%)
Fondling	24 (80%)
Genital Exhibitionism	6 (20%)
Oral	6 (20%)
Intercourse	22 (73.3%)

Table 5

Description of Other Types of Abuse Experienced by Victims (N = 30) and Nonvictims (N = 30)

Abuse Type	Frequency (%)	
	Victim	Nonvictim
Physical	11 Yes (36.7%) 19 No (63.3%)	14 Yes (46.7%) 16 No (53.3%)
Victimizing Others	2 Yes (6.7%) 28 No (93.3%)	1 Yes (3.3%) 29 No (96.7%)

The victim group experienced a wide range of reported sexual abuse. Fondling was the most reported type, reflecting 80% of the group, followed by intercourse which affected 73.3% of the victim group. Genital exhibitionism and oral were the same at six (20%). Other types of abuse identified by the victim and nonvictim groups were physical abuse and victimization

of others. The nonvictim group experienced more physical abuse than the victim group, reflecting 11 (36.7%) versus 14 (46.7%). Also, according to Table 5, the victim group consisted of two (6.7%) who reported victimizing others, as compared to the nonvictim group one (3.3%).

The victim and nonvictim groups were exhibiting self-destructive behavior. A description of the type of behavior occurring is reflected in Table 6. Suicide ideation with aggressive outbursts was the most frequently reported type of self-destructive behavior, reflecting 28 (93.3%) in the sexual abuse victim group, and 27 (90.0%) in the nonvictim group. The analysis also indicates that the adult victims of childhood sexual abuse exhibited a higher percentage of frequent suicide attempts 17 (56.7%), self-mutilating behavior 14 (46.7%) and promiscuity nine (30.0%), as compared with the nonvictimized group reporting nine (30.0%) frequent suicide attempts, five (16.7%) self-mutilations, and four (13.3%) promiscuity's.

Instrument

The instrument used in this study was the Brief Symptoms Inventory (BSI) (Derogatis, 1993). Permission was obtained to utilize the BSI instrument in this study (see Appendix C). This tool is a 53 item self-report symptom inventory designed to reflect the psychological symptom patterns of psychiatric respondents. This self-reporting tool is the short form of the SCL-90-R. The comprehensive nursing health care assessment included data regarding demographic information such as gender, race, marital status, age, mental health diagnosis, and employment status. Nature, frequency, and occurrence of childhood sexual abuse were also included in the comprehensive nursing health care assessment.

Psychological Distress

The BSI (Derogatis, 1993) is a concise self-report scale, providing multidimensional symptom measurement. It is a measure of current, psychological symptom status, and is designed to detect internal distress, often not visible externally. The referent time period for clinical assessment is "the past 7 days including today". Each item of the BSI is rated on a five point scale of distress ranging from "not at all" (0) at one pole to "extremely" (4) at the other. The BSI

Table 6

Description of Self-Destructive Behavior

	Frequency (%)
Suicide Ideation / Aggressive Outbursts	V - 28 (93.3%) N - 27 (90%)
Drug / Alcohol Abuse	V - 16 (53.3%) N - 18 (60.0%)
Frequent Suicide Attempts	V - 17 (56.7%) N - 9 (30%)
Self-Mutilating Behavior	V - 14 (46.7%) N - 5 (16.7%)
Promiscuity	V - 9 (30.0%) N - 4 (13.3%)
Frequent Involvement with Danger	V - 3 (10%) N - 0 (0%)

V = Victim; N = Nonvictim

is scored and profiled in terms of nine primary symptom dimensions and three global indices of distress. The 53 items reflect the three principal levels of interpretation of the BSI, which are superordinate measures of psychological status (global level), syndromal representations (dimensional level), and individual distress symptoms (discrete symptom level). The information obtained from the three levels of analysis should deliver an integrated picture of the nature and magnitude of the respondent's current psychological distress.

The primary symptom dimensions of the BSI are:

1. Somatization (SOM) - Reflects distress arising from perceptions of bodily dysfunction.
2. Obsessive-Compulsive (O-C) - Focuses on measuring thoughts, impulses, and actions that are experienced as irresistible by the individual, and are of a unwanted nature.
3. Interpersonal Sensitivity (I-S) - Centers on feelings of personal inadequacy and inferiority, particularly in comparison with others.
4. Depression (DEP) - Reflects dysphoric mood and affect, representing lack of motivation and loss of interest in life.
5. Anxiety (ANX) - Includes a dimensional component associated with nervousness, tension, panic attacks, and feelings of terror, also a cognitive component involving feelings of apprehension.
6. Hostility (HOS) - Centers on thoughts, feelings, or actions that are characteristic of a state of anger.
7. Phobic Anxiety (PHOB) - A persistent fear response, brought on by a specific person, place, object, or situation. This response is irrational to the stimulus and leads to avoidance/escape behavior.
8. Paranoid Ideation (PAR) - Paranoid behavior represented by projective thought, hostility, suspiciousness, grandiosity, centrality, fear of loss of autonomy, and delusions.
9. Psychoticism (PSY) - Reflective of withdrawal and isolated symptoms of schizophrenia.

The three global indices are:

1. Global Severity Index (GSI) - Measures the current level or depth of the disorder.
2. Positive Symptom Distress Index (PSDI) - Measures the intensity of symptoms.
3. Positive Symptom Total (PST) - Indicates the number of patient-reported symptoms.

Calculating raw scores was completed by first summing the values for the items in each of the nine symptom dimensions and the four additional items. Next the sum for each symptom dimension was divided by the number of endorsed items in that dimension. To calculate the Global Severity Index (GSI), the sums for the nine symptom dimensions and the additional items were added together and then divided by the total number of responses (53 when there are no missing items). The Positive Symptom Total (PST) was calculated by counting the number of positive, nonzero responses. The Positive Symptom Distress Index (PSDI) was calculated by dividing the sum of the item values by the Positive Symptom Total (PST). The raw scores were then converted to standardized t scores, which represented a normalizing transformation and were gender appropriate.

Reliability for the nine symptom dimensions and three global indices of the BSI are of two types, internal consistency and test-retest. Internal consistency coefficients were established on a sample of N = 719 psychiatric outpatients, using Cronbach's coefficient alpha (Derogatis, 1993). The alpha coefficients for all nine dimensions of the BSI are integrated in Table 7 with the current reliability values for this study. Also included in this table are the number of items for each subscale which effects the reliability of the instrument .

Test-retest reliability was determined from a sample of N = 60 nonpatient individuals who were tested across a two-week interval (Derogatis, 1993). The correlation coefficients for all nine dimensions of the BSI including the three global indices were as follows: SOM .68, O-C .85, I-S .85, DEP .84, ANX .79, HOS .81, PHOB .91, PAR .79, PSY .78, GSI .90, PST .80, and PSDI .87. The BSI also revealed an excellent stability coefficient of .90, providing strong evidence that the BSI represents consistent measurement across time.

Table 7

Comparative Reliability Values of the BSI

Subscale	# of Items	(N = 719) Previous Reliability	(N = 30) Current Reliability	
			Victim	Nonvictim
Somatization (SOM)	7	.80	.69	.84
Obsessive-Compulsive (O-C)	6	.83	.88	.89
Interpersonal Sensitivity (I-S)	4	.74	.75	.57
Depression (DEP)	6	.85	.91	.92
Anxiety (ANX)	6	.81	.85	.85
Hostility (HOS)	5	.78	.79	.82
Phobic Anxiety (PHOB)	5	.77	.78	.83
Paranoid Ideation (PAR)	5	.77	.78	.61
Psychoticism (PSY)	5	.71	.55	.68

Derogatis, Rickels, and Rock (1976) formulated convergent validity for the BSI with the MMPI involving the reanalysis of an earlier study comparing the SCL-90-R with the MMPI. Subjects consisted of a sample of N=209 symptomatic volunteers. Since the 53 items on the BSI also appear on the SCL-90-R, the data set was reanalyzed, scoring for the BSI instead of the SCL-90-R. The results of the BSI reanalysis revealed high convergence, with coefficients of greater than or equal to .30. Other studies have supported convergent and discriminant validity of the BSI. For example, a correlation between the BSI and the SCL-90-R on the nine shared symptom dimensions based on a sample of N=565 psychiatric outpatients, demonstrated very high correlations on all nine symptom dimensions (Derogatis, 1993).

Procedure

All records included the Brief Symptoms Inventory (BSI) which was administered upon admission to the Van Buren County Crisis Stabilization Center. The records also included a comprehensive nursing health care assessment which contained information regarding demographic data and past sexual abuse history.

Steps utilized for data collection procedure:

1. Approval was gained from the Grand Valley State University Human Research Review Committee (see Appendix D).
2. Written approval was obtained from the Director of Van Buren County Mental Health for utilizing past client records at Center for Crisis Stabilization (CCS) (See Appendix E).
3. Records of admissions to CCS which meet the research criteria for record selection were utilized. Three years of archival data was explored.
4. Records were reviewed for evidence of self-destructive behavior.
5. Upon reviewing these records, a significant amount of actively psychotic disorders existed, therefore, male and female records were utilized for obtaining appropriate subjects.
6. Next, identification of records reporting childhood sexual abuse were identified.
7. Each group, consisted of those reporting and those not reporting childhood sexual abuse, and were numbered using the system number.
8. Each group consisted of 30 records and were selected using a random chart.
9. All records were filed and easily accessible to the investigator.

Confidentiality was of extreme importance when dealing with this population. Therefore, no names, patient numbers, or identifying data were incorporated in this study. The Director of VBCMh granted written approval for this study on the basis that strict confidentiality was enforced (see Appendix E). Since this study involved retrieval of archival data which was easily accessible, no foreseen risks were identified.

CHAPTER FOUR

DATA ANALYSIS

The purpose of this study was to identify differences in psychological distress exhibited between adult victims and nonvictims of childhood sexual abuse, both groups were acting out in a self-destructive manner. The statistical package used for calculations was the Statistical Package for the Social Studies (SPSS) for Windows. A demographic tool (see Appendix F) was developed to describe the sample. The characteristics selected were: age, gender, race, mental health diagnosis, education, marital status, age at which abuse occurred, nature of abuse, and age at which abuse ceased. A chi-square analysis was used for comparing nominal level variables of measurement between victims and nonvictims on demographic variables. The Brief Symptom Inventory (BSI) reflected interval level of measurement therefore t-tests were used to determine if differences exist in the psychological distress dimensions between those reporting and those not reporting childhood sexual abuse. Determining relationships between the demographic and BSI internal level variables for the sample and victim subsample were performed by using a Pearson r correlation. The correlation coefficients were determined both for the total sample $N = 60$, and for the victim group $N = 30$.

The presence of physical abuse may have altered the responses. Excluding the presence of physical abuse both from the victims and nonvictims controlled for the potential threat to the findings. The removal of those with physical abuse resulted in 19 victims and 16 nonvictims being used for some of the data analysis.

Brief Symptom Inventory Psychological Distress Dimensions

The question under consideration was what are the differences in psychological distress exhibited between adult victims and nonvictims of childhood sexual abuse? The BSI was used to measure twelve different psychological distress dimensions. In this investigation, the top psychological distress dimension for the victim and nonvictim groups was Positive Symptom Total, which indicates the number of patient-reported symptoms. The lowest psychological distress dimension for victim and nonvictim groups was the Global Severity Index, which measures the current level of depth of the disorder (see Appendix G). See Table 8 for the order of the five highest BSI dimensions for the victims and nonvictims.

Table 8

Five Highest BSI Dimensions for the Victims (N = 30) and Nonvictims (N = 30)

Dimension	Mean	Dimension	Mean
<u>Victim</u>		<u>Nonvictim</u>	
Positive Symptom Total (PST)	39.57	Positive Symptom Total (PST)	40.23
Positive Symptom Distress Index (PSDI)	2.52	Depression (DEP)	2.42
Interpersonal Sensitivity (I-S)	2.33	Positive Symptom Distress Index (PSDI)	2.33
Depression (DEP)	2.32	Paranoid Ideation (PAR)	2.04
Obsessive-Compulsive (O-C)	2.32	Anxiety (ANX)	1.98

Comparison Between Victim and Nonvictim Demographics using a Chi-Square Analysis

An investigation of differences between the victims of childhood sexual abuse and nonvictims was explored. Table 9 reflects the results of performing a chi-square test enabling a comparison of the nominal level variables. The results indicate that the female gender had a higher proportion of victims than nonvictims ($X^2 = 4.59$, $df = 1$, $p = .03$). Results also indicated that the self-destructive behavior of frequent suicide attempts and self-mutilation occurred more often in the victims ($X^2 = 4.34$, $df = 1$, $p = .037$; $X^2 = 6.24$, $df = 1$, $p = .02$).

Comparison of BSI Dimensions with Childhood Sexual Abuse Victims and Nonvictims

An independent t-test was used to determine the differences between the BSI dimensions as reported by childhood sexual abuse victims versus nonvictims. The results are reflected in Table 10. As indicated, the BSI dimension Interpersonal Sensitivity is statistically significant ($t = 2.09$, $p = .04$) and has a higher mean in the victim group than nonvictim group, which indicates greater psychological distress impairment of Interpersonal Sensitivity.

Comparison of BSI Dimensions for Victims and Nonvictims Excluding Those Physically Abused

In an attempt to answer the research question, it was deemed necessary to remove the effects of physical abuse once the presence of physical abuse was noticeably occurring throughout the sample. Physical abuse posed a threat to the internal validity of this study, possibly creating biased results. All those reporting physical abuse were excluded from the analysis and independent t-test was then completed. The analysis used 19 childhood sexual abuse victims and 16 nonvictims. Significant differences were found between the BSI dimensions as reported by childhood sexual abuse victims and nonvictims when excluding those physically abused. The results indicate that the BSI dimension of Interpersonal Sensitivity was statistically significant ($t = 2.16$, $p = .04$) and has a higher mean in the victim group than nonvictim group. As Table 11 reflects, another significant difference was found in the BSI dimension of Positive Symptom Distress Index, which measures the intensity of symptoms ($t = 2.16$, $p = .04$). Therefore, when physical abuse is excluded childhood sexual abuse victims have significantly higher scores for both

Table 9

Chi-Square Analysis Comparing Demographic Variables of Victims and Nonvictims N = 30)

Demographic	X ²	df	p
Gender	4.59	1	.03*
Marital Status	.51	3	.91
Race	.37	1	.54
Frequent Suicide Attempts	4.34	1	.04*
Self-Mutilation	6.24	1	.01*
Promiscuity	2.45	1	.12
Drug and Alcohol Abuse	.27	1	.60
Frequent Involvement with Danger	3.16	1	.07
Suicide Ideation with Aggressive Outbursts	.218	1	.64
Abusing Others	.35	1	.55
Diagnosis	14.51	8	.07

* = $p < .05$

Table 10

Differences of BSI Dimensions for Victims (N = 30) and Nonvictims (N = 30)

Dimension	Mean	Std Dev	df	t value	p
Interpersonal Sensitivity (I-S)	V - 2.33 N - 1.80	1.10 .85	58	2.09	.04

V = Victim; N = Nonvictim

Table 11

Comparison of BSI Dimensions for Victims and Nonvictims Excluding Those Physically Abused

Dimension	Mean	Std Dev	t-value	df	p
Interpersonal Sensitivity (I-S)	V - 2.53 N - 1.76	1.08 .99	2.16	33	.04*
Positive Symptom Distress Index (PSDI)	V - 2.69 N - 2.19	.64 .72	2.16	33	.04*

V = Victim; N = Nonvictim; * = $p < .05$

Interpersonal Sensitivity and Positive Symptom Distress Index.

Relationship of BSI Dimensions to Age

Initially, the Pearson r was used to examine the relationship between the variables of age, educational level, and BSI dimensions of the sample ($N = 60$). There was not a significant relationship found between education and the BSI dimensions. The relationship between age and the BSI dimension of Somatization was identified in that as age increases, so does Somatization, which is a persons' ability to reflect distress arising from perceptions of bodily dysfunction ($r = .29$, $p = .02$). Furthermore, it was found that in analyzing variables of age and BSI dimensions with only victims ($N = 30$) a similar finding occurred (see Table12). Not only did a weak positive correlation exist between age and the BSI dimension Somatization ($r = .35$; $p = .05$), but a weak positive correlation was also found between age and the BSI dimension Positive Symptom Total ($r = .39$; $p = .03$). Therefore, findings indicate that as age increases, the ability to reflect distress arising from perceptions of bodily dysfunction (SOM) and the ability to report symptoms (PST) increases in the adult victims of childhood sexual abuse. The limitation of not analyzing variables of age and BSI dimensions with nonvictims exists in this investigation.

As can be seen in the preceding tables, the victims of childhood sexual abuse were significantly correlated ($p < .05$) with the following BSI dimensions: Interpersonal Sensitivity, Positive Symptom Distress Index, Somatization, and Positive Symptom Total.

Examining the relationship between the BSI dimensions and age that abuse began and the age that abuse ceased, interesting findings resulted. There was an inverse relationship found, (see Table 13), between age abuse ceased and the BSI dimensions of Depression ($r = -.38$, $p = .04$) and Anxiety ($r = -.37$, $p = .05$). There was no relationship between the age sexual abuse began and the BSI dimensions. There was one record that neglected to include the age at which childhood sexual abuse began and ceased. Therefore, statistical calculations reflected only 29 victims. The older the person was when childhood sexual abuse ceased, the lower the BSI Dimension score for both Depression and Anxiety.

Table 12

Correlations Between BSI Dimensions and Age

Dimension	Age	
	r	p
Somatization (N = 60)Victim and Nonvictim (SOM)	.29	.02
Somatization (N = 30)Victim (SOM)	.35	.05
Positive Symptom Total (N = 30) Victim (PST)	.39	.03

Table 13

Correlation Between BSI Dimensions and Age Abuse Ceased

Dimension	Age Abuse Ceased	
	r	p
Depression (DEP)	-.38	.04*
Anxiety (ANX)	-.37	.05*

* = p < .05

CHAPTER FIVE

DISCUSSION AND IMPLICATIONS

Merging the theoretical frameworks at the level of adaptation provides an opportunity for considering the interconnection between excessive adverse stimulation, and the formation of a coping response developed for protection and survival in adulthood. Sister Callista Roy's Adaptation Model (Roy, 1976) was the conceptual framework used for interpreting how an external stimulus can develop into an impaired coping response (self-destructive behavior). The Information Processing of Trauma Model (Hartman, & Burgess, 1993) addresses the interconnection between excessive adverse stimulation (childhood sexual abuse) which compromises the limbic system and leads to restricted cognitive development. The merging of the theoretical frameworks at the level of adaptation may explain how self-destructive behavior is the outcome of a person's unsuccessful adaptation to the external traumatic stimulus, childhood sexual abuse.

Findings in this investigation suggest that childhood sexual abuse has negative psychological consequences (as identified by the BSI) which inhibit interpersonal development and growth. Another interesting finding is that the sexually abused victim is more likely to react with impaired coping responses that involve a physical aggressive infliction in a self-destructive manner. These combined findings may suggest that childhood sexual abuse alters the adults adaptive level which leads to a restricted cognitive interpersonal development. Psychological distress is internalized in the form of interpersonal sensitivity, which contributed to the impaired coping response, self-destructive behavior.

The victim sample in this study consisted of 76.7% females and 23.3% males with the nonvictim sample being evenly distributed at 50% each. This finding concurs with Trickett, & Putman (1993) in that although both genders are affected by childhood sexual abuse, females are found to be victims of sexual abuse much more often than males, the usual ratio being about 4 to 1. This study found the mean age range childhood sexual abuse occurred between the ages of 7 and 12. Similarities to this finding were noted in Trickett & Putman (1993), who found that while abuse occurs across the age span, the peak age at onset tends to be 7 to 8 years. Mullen et al. (1994) also found that the most common ages to have been abused were between 8 and 12 years, which is the critical phase of puberty.

Roy Adaptation Model

According to the Roy Adaptation Model (1976) the variable of childhood sexual abuse is the focal stimulus which this study suggests has damaging effects on its adult victims. The majority of the victims reported that the type of sexual abuse most experienced was fondling (80%) and intercourse (73.3%). This focal stimulus occurred over a 5 year span, affecting the victims developmental phase of puberty. Roy (1976) conceptualized that the adaptive modes are utilized in order to cope with changes in the environment and emit responses in the form of coping behavior. This study suggests that childhood sexual abuse produces development of dysfunctional adaptive modes resulting in the impaired coping response of self-destructive behavior. The BSI was used for identifying psychological distress dimensions which suggest what adaptive mode is affected. The findings of this study suggest that the impaired coping ability that adult victims of childhood sexual abuse exhibit lead to psychological distress in the form of interpersonal sensitivity (I-S), with a positive symptom distress index (PSDI) which indicate a high level of interpersonal sensitivity intensity.

Previous research indicates that a number of conditions of maladaptation are associated with child sexual abuse. Adult victims of childhood sexual abuse experience immobilizing anxiety, depression, guilt, hopelessness, shame, powerlessness, and lack of anger impulse control (van der

Kolk et al., 1991). According to Trickett & Putnam (1993), the areas thought to be most relevant include feelings of self-worth, beliefs about power and control, beliefs about cognitive and social competence, feelings of depression or negative affect, dissociation, aggressiveness, and sexual acting out. Koverola and Pound (1991) also examined the long-term effects of childhood sexual abuse, concluding that depression, low self-esteem, fear, guilt, interpersonal problems, sexual difficulties, suicide and self-mutilation are behaviors most common. This study suggests that Interpersonal Sensitivity was the primary internal psychological distress experienced. Therefore, nursing intervention should be directed toward the adaptive modes involving Interpersonal Sensitivity. Targeting intervention specific for repairing the adaptive modes self-concept and interdependence, the restoration of integrity and adaptation may be promoted.

Another finding which corresponds with recent research is the higher incidence of suicide attempts and self-mutilation that adult victims of child sexual abuse display, as compared to those not sexually abused. Sexual abuse during early childhood and latency has been strongly correlated with suicide attempts and total self-injurious behaviors (i.e. self-mutilation) but not other self-injurious behaviors (i.e. drug and alcohol abuse) (van der Kolk et al., 1991).

In this study, adult victims reported promiscuous behaviors more than nonvictims. Although sexual dysfunction is a documented outcome of childhood sexual abuse (Green, 1993), promiscuity was not statistically supported in this study. Similarities between victim's and nonvictim's self-destructive behavior of suicide ideation/aggressive outbursts was noted. The mental health diagnosis of depression was also found to affect the majority of the victims and nonvictims. Koverola and Pound (1993) found that depression is a very common long-term sequelae noted in adult victims of child sexual abuse. Therefore, the present finding was consistent with research. The high prevalence of suicidal ideation/aggressive outbursts and depression in the nonvictim group may have occurred due to childhood physical abuse occurring in 46.7% of that sample.

An assumption of this study is that childhood sexual abuse negatively affects the cognator

subsystem. Roy and Roberts (1981) defined the cognator subsystem as the information processing center responsible for learning, perception, judgment, emotion, knowledge, and decision making in response to stimuli. Past research identifies a cognitive, survival response mechanism which is linked to a dissociative coping response resulting in dysfunctional development (Teicher, et al., 1993; van der Kolk et al., 1991; Hartman & Burgess, 1993; Green, 1993). Roy (1976) concludes that this dysfunctional development is directly related to the adaptive modes.

This study was aimed at attempting to explain how the external stimulus of childhood sexual abuse contributed to the impaired coping response of self-destructive behavior via internal psychological distress. Therefore, a second theoretical model was incorporated, targeting the cognator subsystems malfunction, which led to the dysfunctioning self-concept and interdependence adaptive modes.

Information Processing of Trauma Model

According to Hartman & Burgess (1993), incoming external traumatic stimuli eventually overwhelms the limbic system resulting in a alerting response which over time alters sensation, perception, and cognition, becoming the survival response of dissociation. There is increasing research devoted to identifying the limbic system as the primary neurological system for coding incoming information and regulating the output of processes such as eating, sleeping, attachment, affect, sex, and aggression (Teicher et al., 1993). Since Roy (1976) defines the cognator subsystem as being the information processing center and Hartman & Burgess (1993) defined the limbic system as being the primary system for coding incoming information, an assumption can be made that they are one and the same. Therefore, the incoming external traumatic stimulus of childhood sexual abuse adversely alters the immature limbic system/cognator resulting in developmental dysfunction.

In this study, the BSI was used to measure twelve psychological distress dimensions. This study supported the presence of Interpersonal Sensitivity and Positive Symptom Distress

Index as psychological distress dimensions for victims and not nonvictims. Other dimensions reflected on the BSI tool that would have suggested a limbic system involvement would have been Hostility and Anxiety. This investigation did not identify a difference between victim's and nonvictim's Hostility and Anxiety psychological distress. However, the findings did identify the Interpersonal Sensitivity difference between victim's and nonvictim's, which can also be related to the limbic system's regulation of attachment and affect. Another finding which can be related to limbic system function is the aggressive nature of the victim's self-destructive behavior. Since the victim's impaired coping is more a self-inflicted destructive behavior (i.e. self-mutilating and frequent suicide attempts), this study suggests that the limbic system is involved.

Other factors may be affecting the results of this study. Hartman & Burgess (1993) identified that the survival response of dissociation impedes the development of the information processing center, thereby restricting the child to develop cognitively in order to deal with interpersonal intimacy and heightening their aggression and/or avoidance. Mullen (1993) found that the long term impact of childhood sexual abuse coincides with this subsequent developmental level, resulting in a defective personal and social functioning in adulthood.

Therefore, the results of this study suggest a combined effect of maladaptation and developmental dysfunctions which affect the victim's coping abilities as suggested by the conceptual framework. The restricted cognition which resulted from the developmental dysfunction leads to adaptive mode dysfunction which then leads to psychological distress over difficulties dealing with interpersonal issues. It was found that the victims in this study were at the already challenging and demanding developmental phase of prepuberty and puberty when childhood sexual abuse occurred. This developmental phase alone has the potential to be stressful and produce hyperarousal states in the developing limbic system. The heightened psychological stress induced by sexual abuse increases the degree to which the pubertal period is stressful, making the developmental task of this period less-than-optimal (Trickett & Putnam, 1993). The psychological stress induced by sexual abuse, affects the developing child by changing the

hyperarousal to malfunctioning, which results in impaired coping abilities as adults. This developmental disruption that childhood sexual abuse generates is what induces the vulnerabilities to later disorders (Mullen et al., 1994).

Other findings of this study suggest that as the age increases when childhood sexual abuse ceases, the psychological distress dimension of Depression and Anxiety decreases. Although a statistical difference did not exist between victims and nonvictims on Depression and Anxiety dimensions, a negative statistical correlation did result. Integrating this finding in relation to the combined theoretical frameworks suggests that adaptation to stimuli occur over time, even when the stimulus is traumatic and has negative consequences. The person's adaptive level has the ability to negatively adapt to adverse stimulation by producing a coping response developed for protection and survival. This protective coping response produces a numbing effect which decreases the perceived psychological distress of Depression and Anxiety. The utilization of the dissociative defenses may be what produces cognitive deficits that contribute to psychological distress and suffering, but may also be the adaptive level's way of promoting survival during excessive adversity. This, in turn, may explain why some adult victims of childhood sexual abuse exhibit no symptoms indicative of psychological disorder, appearing to cope more effectively than others do.

Another correlation found in this study existed between the victims present age and the BSI dimension Somatization and Postive Symptom Total. That is as age increases, the ability to reflect distress arising from perceptions of bodily dysfunction and the ability to report symptoms increases. This finding suggests that as one ages, the presence of and/or their ability to verbalize and describe feelings and physical complaints increases. Although this may be true, past research suggests another possibility. Trickett & Putman (1993) found that adult victims of childhood sexual abuse exhibit many symptoms of maladaptation, including somatic complaints. Therefore, this finding could suggest maladaptation as a response to childhood sexual abuse.

Application to Nursing Practice

In the present investigation, two individuals from the victim group admitted to sexually offending others. This small number is clinically significant when realizing the life-long lasting potential damage inflicted on the victims. Research indicates that sexually abused children are at risk for repeated victimization as adults, and a smaller but not insignificant number of them will become child molesters (Green, 1993). The current identification of sexual abuse victims who have become perpetrators only highlights the urgency of prevention and nursing intervention.

Also, the findings suggest that childhood sexual abuse victims have distortions manifested many years later when the individual is faced with the demands of adulthood leaving them susceptible to mental health problems. The dysfunctions, psychological distress, and maladaptations identified and documented in this report are suggested to produce ongoing influences of disruption due to the scarred developmental phase. Therefore, treatment should be focused on a therapeutic intervention plan that will mend the developmental scares by encompassing the wider aspect of the developmental experience. Nursing intervention involving strengthening the adaptive modes of self-concept and interdependence may also improve the person's adaptive level to tolerate stress, which will decrease psychological distress and promote adaptation.

Limitations

Limitations that were consistently found while reviewing literature and were also present in this study revolve around the research design, the sample population, and the tool utilized for measurement of symptoms. This study used an ex post facto, descriptive-correlational research design. Since manipulation of the independent variable (childhood sexual abuse) could not occur, causality cannot be inferred. Also, correlations do not provide understanding of the natural course of the child's adaptation to sexual victimization.

The current study's self-reporting accuracy of childhood sexual abuse may also produce problems with validity, due to the lack of specific behavioral markers validating the

sexual abuse presence. Repression of memory, dissociation, or underestimation of occurrences, may have contaminated the findings of this study. Acknowledging that individuals selected for study as victims of childhood sexual abuse were actually abused would have prevented this limitation. Past documentation in medical or legal records would provide proof of accuracy of those individuals reporting childhood sexual abuse. Another limitation is that although the BSI instrument is a reliable self-report symptom inventory designed to detect internal distress and reflect the psychological symptom patterns of psychiatric respondents, it is not designed for identifying the unique effects of childhood sexual abuse.

Generalizations regarding all adult victims of childhood sexual abuse cannot be done. Also, this study's small sample size is a limitation. The sample consisting of physical abuse victims threatened to contaminate and bias this study's results. Excluding physical abuse for statistical calculations diminished this threat, but decreased the sample even more. Another limitation that may have contaminated the results of this study were blending the male and female gender in the sample studied. Their responses to the BSI tool may have partially been based on gender, and not solely a result of childhood sexual abuse.

Modifications

Findings from this investigation might serve to identify the acute impact that childhood sexual abuse has on adult victims. It also may correlate self-destructive behavior to a maladaptation response producing psychological distress and suffering. But, it cannot say that childhood sexual abuse causes a developmental dysfunction, causing psychological distress which results in self-destructive behavior. A prospective study that begins with an explanation of current causes for self-destructive behavior, then moves forward in time to the effects would provide a stronger study. Using a longitudinal research design in which data from the same sample is collected at different points in time would allow for specific documentation over an extended period of time. The long term effects as well as the coping responses utilized for functioning verses malfunctioning, and adapting verses maladapting can be identified and

examined during the development phases into adulthood. Developing a prospective longitudinal research design might support a finding that childhood sexual abuse causes psychological distress which results in self-destructive behavior in adulthood.

Another modification which might have provided a stronger study would be in the selection of the sample. By choosing a sample that is either male or female gender, and selecting those reporting only childhood sexual abuse, the sample becomes less varied resulting in a stronger study. Also the use of a sample population larger than the one used in this study is suggested.

Finding a research tool designed specific for the unique effects associated with childhood sexual abuse would present a clearer picture of the maladjustments and maladaptations. However, extant research on the effects of child sexual abuse leaves important gaps in understanding the uniqueness of the effects.

Recommendations

Numerous areas of childhood sexual abuse are in need of additional research. Further research indicating the possible physiological effects of sexual abuse and the relationships of such effects to psychological development is needed. Findings which document specific developmental dysfunctions based on physiological and/or psychological alterations may increase awareness of the life long damaging effects of childhood sexual abuse. Prioritizing prevention may ultimately be targeted along with treatment.

Areas involving men sexually abused as children are lacking research. Further comparison between men psychiatric inpatients sexually abused as children, with men psychiatric inpatients who were not, could determine whether men sexually abused show symptom patterns similar to those of women sexually abused.

Other areas that are lacking data involve adult victims of childhood sexual abuse who are effectively functioning and coping on a daily basis. Comparing those adult victims who are using impaired coping as a functioning technique can identify strategies for adaptation and effective

copied and would greatly increase the body of knowledge regarding the ability to cope with childhood sexual abuse.

Research developing effective approaches to prevent the psychobiological impact of childhood sexual abuse is also lacking. The impact that hormonal alterations actually play in creating the adversities of childhood sexual abuse may lead into preventive approaches. This would also assist in understanding when and under what circumstances these life long alterations develop, and might assist in developing a therapeutic treatment plan.

APPENDICES

APPENDIX A

Brief Symptom Inventory (Selected Items)

	Not At All	A Little Bit	Moderately	Quite A Bit	Extremely	HOW MUCH WERE YOU DISTRESSED BY:
21.	()	()	()	()	()	Feeling that people are unfriendly or dislike you
35.	()	()	()	()	()	Feeling hopeless about the future
46.	()	()	()	()	()	Getting into frequent arguments

Note. From Brief Symptom Inventory Administration, Scoring, & Procedures Manual-II, by
Leonard R. Derogatis, PhD, 1993, Minneapolis, MN: National Computer Systems, Inc.
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APPENDIX B

**VAN BUREN COUNTY COMMUNITY MENTAL HEALTH
HEALTH CARE ASSESSMENT**

**NAME:
ADDRESS:
DOB: SYS. NO.:
DATE OF EXAM:
TELEPHONE:
CASE MANAGER:
CURRENT PLACEMENT:
ADDRESS:
PREVIOUS PLACEMENT:
ACTIVITY PROGRAM:
ALLERGIES:**

**MEDICAL:
ADDRESS:
TELEPHONE:
PSYCHIATRIST:
ADDRESS:
TELEPHONE:
CONSULTANTS/GUARDIAN:
INSURANCE:**

VITAL SIGNS

T: P: R: BP: H: WT: IDEAL WT RANGE:

DIAGNOSIS:

SUBSTANCE ABUSE:

IMMUNIZATIONS:

PAST MEDICAL HEALTH HISTORY:

Health Care Assessment

MEDICATIONS:

MENTAL HEALTH HISTORY:

LAB (initially all available, then all from last year)

PRESENT PROBLEM CAUSING READMISSION:

REVIEW OF SYSTEMS:

Mental/Behavior Status:

Oriented to person place and time	Aggression	Memory Limitations
Confused	Insomnia	Hallucinations X
Delusions	Suicidal/Homicidal	Type:
Comments:		

Speech:

No Deficiency	Speech Limitation
Aphasic	Does not speak English
Comments:	

Health Care Assessment

VISION:

Vision		Hearing	
No Deficiency		No Deficiency x	
Limited R: L:	Contact Lenses	HOH	R: L:
	Glasses:	Aid:	
Blindness	Cataracts	With Client	Not With Client
Last Exam:		Last Exam:	
Comments:		Comments:	

EENT:

Skin and Hygiene:

No Deficiency					
Dry	Moist	Color:	Turgor:	Normal:	Abnormal
Hygiene:	Good	Poor	Verbal Prompts	Independent	Physical Assi
Comments:					

Respiratory:

Shallow	Deep	Irregular	Stridor
Abnormal Breath Sounds		Describe:	
Comments:			

Health Care Assessment

Cardiovascular:

Apical Pulse	Radial Pulse	Regular Rhythm	Pedal Pulse Bilaterally Equal
Edema of Extremities	Pitting	Non Pitting	
Capillary refill immediate	Prolonged	Mucosas membranes moist/pink	
Response to physical activity			
Comments:			

Explain Problem: Graph all identified alterations.

- 1) Bruises:
- 2) Rashes:
- 3) Scars:
- 4) Ulcerations:
- 5) Incisions:
- 6) Decubitus:
- 7) Abrasions:
- 8) Edema:
- 9) Other:

Comments:

Neuro-Muscular: No Deficiency			Gastrointestinal: No Deficiency	
P.E.R.R.L.			Last Dental Exam:	
Incoordination	Exercise Routine		Diet:	Regular X
Weakness	Seizures N/A			Special Type:
Sensory Loss	Type:			# Meals/Day
Paralysis	Frequency		Assistance with Meals: Yes No	
	Last Seizure		Difficulty Chewing	Diarrhea

Health Care Assessment

Where?			
R.O.M. Loss		No Teeth	Constipation
Contracture	Stiffness	Dentures	Colostomy
Gait Impairments	Deformity	Upper	Ileostomy
Joint Muscle	Amputation	Lower	Hemorrhoids
Comments:		Nausea	
		Distended Abdomen	
		Appetite Problem	Dysphasia
		Bowel Sounds	Eating Disorders
		Elimination Pattern: Daily	
		Prompts/Assistance	
		Abnormal Stool Color	
		Comments:	

Reproductive/Genitourinary:

Reproductive/Genitourinary: No Deficiency		
Menses	Incontinence	Frequency
Date LMP	Dribbling	Urgency
PAP: Date:	Nocurtia	Odor
Discharge:	(Describe)	Burning
Birth Control/Contraceptive:		Type:
Self/Breast Exam:	Comments:	
Number of Pregnancies:		

Health Care Assessment

History of Sexual Abuse:

Comments:

Age at which sexual abuse occurred. _____

Age at which abuse ceased. _____

MEDICAL STRENGTHS:

MEDICAL LIMITATIONS:

HEALTH CARE MONITORING CONSUMERISM RATING:

Low Moderate High

NURSING DIAGNOSIS:

SUMMARY OF HEALTH STATUS:

RECOMMENDATIONS:

Susan Wood, RN

Date

Physician

Date

APPENDIX C



December 9, 1996

Susan Wood
43539 Carla Drive
Paw Paw, MI 49079

Dear Ms. Wood.

Thank you for your letter requesting permission to reproduce the copyrighted Brief Symptom Inventory™ (BSI™) test in the appendix of your thesis.

NCS Assessments will not grant you permission to reproduce the entire instrument, but will grant you permission to reproduce up to *three* (3) items from the BSI test to be used as examples in the appendix of your thesis. This grant of permission is subject to the following conditions:

1. A proper copyright notice in the name of Leonard R. Derogatis, Ph.D. followed by the words, "Reproduced by Permission", shall be included in the copy made. This notice should be placed on the first page of the appendix. In this case, the proper copyright notice is the one found on the BSI test booklet copyrighted by Dr. Derogatis and published by NCS.
2. This grant of permission is non-exclusive and is not to be construed as granting you any rights other than the permission described above.

Thank you for your attention to copyright matters. Best wishes on your thesis.

Sincerely,

Virginia Smith
Product Manager

cc: D. Roble
D. DeVoe

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NCS Assessments

5605 Green Circle Drive Minnetonka, MN 55343 612-939-5000



APPENDIX D

1 CAMPUS DRIVE • ALLENDALE MICHIGAN 49401-9403 • 616/895-6611

March 11, 1997

Sue Wood
43539 Carla Dr.
Paw Paw, MI 49079

Dear Sue:

Your proposed project entitled "*An Investigation of Psychological Distress and Self Destructive Behavior in Adult Victims of Childhood Sexual Abuse*" has been reviewed. It has been approved as a study which is exempt from the regulations by section 46.101 of the Federal Register 46(16):8336, January 26, 1981.

Sincerely,

A black rectangular box redacting the signature of Paul Huizenga.

Paul Huizenga, Chair
Human Research Review Committee

CMH

of Van Buren County

COMMUNITY MENTAL HEALTH

801 Hazen Street
P.O. Box 249
Paw Paw, MI 49079
(616) 657-5574
TDD: (616) 657-4566
FAX: (616) 657-3474

credited by:
Commission on
Accreditation of
Rehabilitation
Facilities

APPENDIX E


February 18, 1997

Susan Wood
43539 Carla Drive
Paw Paw, MI 49079

Dear Mrs. Wood,

The purpose of this letter is to provide verification of approval for use of archival data at Van Buren Community Mental Health's Center for Crisis Stabilization. Archives meeting research criteria can be utilized only on the basis that strict confidentiality is enforced and maintained. No names, patient numbers, or identifying data can be incorporated in this study.

Sincerely,



John Clement, Director
Van Buren Community
Mental Health Services

APPENDIX F

SYSTEM NO. _____

DEMOGRAPHIC DATA TOOL

The following information was obtained from the comprehensive nursing assessment.

1. Clients age in years. _____ years

2. Clients gender.

() 1. Male

() 2. Female

3. Clients marital status.

() 1. Never Married

() 2. Married

() 3. Divorced

() 4. Separated

() 5. Widowed

4. Clients employment status.

() 1. Yes

() 2. No

5. Clients highest grade or year of school completed.

None 00

Elementary 01 02 03 04 05 06 07 08

High School 09 10 11 12

College/technical school 13 14 15 16

Some graduate school 17

Graduate/professional degree 18

6. Does client have health insurance?

() 1. Yes

() 2. No

7. Client race.

- ☐ 1. African American
- ☐ 2. Asian
- ☐ 3. Caucasian
- ☐ 4. Hispanic
- ☐ 5. Native American
- ☐ 6. Other _____(specify)

8. Age at which childhood sexual abuse occurred. _____

9. Age at which abuse ceased. _____

10. Nature of abuse.

- ☐ 1. Fondling
- ☐ 2. Exhibitionism
- ☐ 3. Intercourse
- ☐ 4. Other _____(specify)

APPENDIX G

Comparison of the BSI Dimensions for Victims (N = 30) versus Nonvictims (N = 30)

Dimension	Mean	Std Dev
Somatization (SOM)	V = 1.23 N = 1.21	.77 .89
Obsessive-Compulsive (O-C)	V = 2.32 N = 2.1	1.05 1.11
Interpersonal Sensitivity (I-S)	V = 2.33 N = 1.8	1.10 .85
Depression (DEP)	V = 2.32 N = 2.42	1.30 1.25
Anxiety (ANX)	V = 2.23 N = 1.98	1.11 1.01
Hostility (HOS)	V = 1.59 N = 1.63	1.08 1.13
Phobic Anxiety (PHOB)	V = 1.55 N = 1.46	1.11 1.11
Paranoid Ideation (PAR)	V = 2.13 N = 2.04	1.03 .86
Psychoticism (PSY)	V = 1.94 N = 1.82	.89 1.00
Global Severity Index (GSI)	V = .48 N = .46	.20 .20
Positive Symptom Distress Index (PSDI)	V = 2.52 N = 2.33	.16 .66
Positive Symptom Total (PST)	V = 39.57 N = 40.23	10.86 9.14

V = Victim; N = Nonvictim

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