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Personality and Demographic Characteristics of Victims of Sexual Abuse and Self-Mutilation

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PERSONALITY AND DEMOGRAPHIC CHARACTERISTICS OF VICTIMS OF SEXUAL ABUSE AND SELF-MUTILATION

by

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A Dissertation
Submitted to the Graduate Faculty
of the
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Doctor of Philosophy

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This dissertation, submitted by Shirley J. Rader in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

[Signatures]

This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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Shirley Rader
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To Sarah Ann Reardon

You have not died in vain.
ABSTRACT

The purpose of this study was to compare demographic and personality characteristics of a group of inpatients at a psychiatric hospital in New York State who were sexually abused and who were self-mutilators (N = 64) with: a group of sexually abused inpatients (N = 42); a group of self-harming inpatients (N = 25); and a group of selected general psychiatric inpatients (N = 25). All subjects were 18 years of age or older at the time of the study and over 90% of the participants were females.

It was hypothesized that sexually abused/self-mutilating patients would show greater similarity to the symptoms of a Post Traumatic Stress Disorder and greater psychiatric symptomatology and maladjustment than the other comparison groups.

Data were collected from patient demographic and psychiatric records, and from the results of the MMPI-2 and the Personal Assessment of Responses to Abuse (PARA). Principle statistics used in this study included descriptive statistics, analysis of variance, the t Test, the Chi Square Tests, and Pearson product moment correlation.

Results of the investigation showed general support for the hypotheses that inpatients who were sexually abused and self-mutilating showed more symptomatology associated with Post Traumatic Stress Disorder (PTSD) with higher scores on the F, 4, 6, 8, and 0 scales of the MMPI-2. However, the PK and PS Scales from the MMPI-2, developed to measure PTSD, were not effective group discriminators. Results also showed higher scores on: depression, poor social adjustment, and health concerns than the comparison groups. The sexually abused/self-mutilating group also showed greater sexual trauma than the sexually abused group as measured by the PARA.
It was concluded that sexually abused/self-mutilators may be a unique subgroup of sexually abused victims. Further research in this area should utilize sexual abuse-specific instruments such as the PARA and also employ multivariate research designs.
CHAPTER I
INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

At one time it was believed that sexual abuse was a rare occurrence that happened only under unusual circumstances or to poor families (VanderMey & Neff, 1982). Over the last few years, helping professionals have discovered that it is a very widely occurring practice that includes families and individuals of all geographic, educational and socioeconomic status (Peters, 1986; Savageau, 1985; VanderMey & Neff, 1982; Washington County Human Services, 1985). Previous research has shown that one of every four females and one of every six to eight males under the age of 18 have been victims of child sexual abuse (Savageau, 1985). Herman (1992a) found that 40-60% of outpatient adults and 50-70% of inpatient adults have a history of physical or sexual abuse (see also Briere & Runtz, 1987; Briere and Zaidi, 1989; Bryer, Nelson, Miller, & Krol, 1987; Carmen, Reiker, & Mills, 1984). There is little doubt that such victimization can be quite harmful and long lasting, depending upon a large number of variables, including: age of first abuse; type, duration, and frequency of abuse; intrapersonal and interpersonal resources available to the victim; relationship(s) to the offender(s); reactions of others to the abuse disclosure; and whether physical force was involved. Multiple symptoms have been found in sexual abuse victims, including chronic depression, social withdrawal, psychotic and dissociative symptoms, substance abuse, impulsivity, rage, suicidality, ego fragmentation, affective and anxiety disorders, reenactment and revictimization, somatization, personality disorders, cognitive distress,
sexual dysfunction, interpersonal sensitivity and paranoia, and self-mutilation or self-harm (Briere, 1988; Browne & Finkelhor, 1986a & b; Bryer, et al., 1987; Gelinas, 1983; Goodwin, 1988; Herman, 1992). Several terms have been suggested to describe the psychological effects of sexual abuse, including traumatic neurosis (Gelinas, 1983), stress-response syndrome (Horowitz, 1986), post-sexual abuse syndrome (Briere, 1984, 1989), and child sexual abuse accommodation syndrome (Summit, 1983). In addition, several writers have suggested that sexual abuse during childhood may produce either chronic or delayed PTSD in later life (Blake-White & Kline, 1984; Briere, 1989; Briere & Runtz, 1987; Donaldson & Gardner, 1985; Gelinas, 1981, 1983; Goodwin, 1984; Lindberg & Distad, 1985a; Van der Kolk, 1987). Due to the severe and prolonged trauma and symptomatology, because the repetitive trauma seems to amplify and generalize the symptomatology, Herman (1992) suggests a separate posttraumatic stress disorder diagnosis, DESNOS (Disorder of Extreme Stress Not Otherwise Specified).

PTSD is primarily associated with male veterans of military combat, and victims of serious crimes, accidents, and disasters (Janoff-Bulman, 1985). Reactions include shock, confusion, helplessness, anxiety, fear, depression, intrusive flashbacks, and physical sensations (Ayalon, 1983; Black, 1982; Eth & Pynoos, 1985; Gil, 1990; Newman, 1976). Lindberg & Distad (1985a) found that each of the eleven victims in their study met the DSM-III-R (Diagnostic and Statistical Manual of Mental Disorders-Revised; American Psychiatric Association, 1987) criteria for PTSD. Gelinas (1983) found abuse victims experiencing dissociative symptoms, substance abuse, impulsivity, self-mutilation, and suicidality, all characteristics of PTSD.

In assessing the symptomatology of victims, previous researchers have recommended the use of standardized tests (MMPI, Rorshach, etc.) as well as the development of instruments designed to specifically measure residuals or symptoms of sexual abuse (Briere, 1988). However, few studies have used standardized instruments,
preferring instead to use clinical case studies, unstructured psychiatric interviews, and mental health agency reports (Alexander, Neimeyer, Follette, Moore, & Harter, 1989; Briere, 1989; Scott & Stone, 1986; Tong, Oates, & McDowell, 1987).

Several researchers have used the MMPI, and have found disproportionately high numbers of 4-8 profiles in clinical samples of survivors (Briere, 1989; Scott & Stone, 1986a; Tsai, Feldman-Summers, & Edgar, 1979). MMPI clinical studies of patients with PTSD are rare, due to the fact that descriptive criteria for diagnosing PTSD were formulated only recently (American Psychiatric Association, 1987), and the criteria are not firmly fixed (Greene, 1988). Also, most MMPI research studies have focused on male combat veterans, with very little published regarding noncombat forms of trauma (Penk, Keane, Robinowitz, Fowler, Bell, & Finkelstein, 1988). Therefore, researchers have recommended additional inquiries unique to each form of trauma (Penk, et al., 1988), including identifying demographic variables and symptomatology, controlling for Axis I and II disorders, controlling moderator variables (education, socioeconomic status, age, ethnicity), using larger sample sizes, and reviewing the special scales (Content, Supplementary, Harris-Lingoes) and critical items on the MMPI (Briere, 1989; Roland, Zelhart, & Dubes, 1988).

Finally, little research has been completed in using the MMPI to assess the characteristics of sexual abuse victims who may or may not self-harm. Previous studies have combined sexual abuse victims who self-harm (frequently given a borderline personality disorder diagnosis) with those who do not self-harm, resulting in confused findings which may not be indicative of victims who either self-harm or who do not. As a result, attempts at treatment have been essentially the same for both groups. There is a need to evaluate the two groups separately, and additional research needs to be attempted to differentiate between them.
Review of the Literature

Previous Work With Sexual Abuse

Freud, in the early 1890's, theorized "that the origin of hysterical neuroses lay in the early sexual traumas experienced by young girls" (Walker, 1988, p. 5). He held that, according to the seduction theory, these sexual traumas were real and resulted in a variety of neurotic symptoms. Although he had previously noted that the trauma was often perpetuated by the fathers, he publicly identified nurses, governesses, maids, and distant relatives as the offenders (Walker, 1988; Malcom, 1983; Masson, 1984). However, by 1897, giving in to public pressure and his own uncomfortable feelings with this issue, he had renounced the theory in favor of the drive theory and the Oedipal complex (Walker, 1988). He then hypothesized that girls have sexual feelings toward their fathers, and that the memories of sexual trauma were based on sexual wish-fulfillment fantasies of the child (Lerman, 1986). The children were blamed, rather than the fathers, and the "seed of doubt" was planted (Walker, 1988). Still today, because of Freud's influence, therapists and many psychoanalysts still interpret women's childhood experiences as fantasies arising from Oedipal conflicts (Briere, 1989; Walker, 1988).

In the last fifteen to twenty years, because of a growing concern regarding the prevalence of abuse, mental health professions have been mandated to research, interact, and/or develop programs to protect the child who has been sexually abused. As a result, there has been a major effort at investigating etiology, symptomatology, and treatment approaches to the problem. Finkelhor, in 1986, in compiling a resource summarizing the data at that time, stated:

It was not until the mid-70's that child sexual abuse first began to appear on the agenda of mental health and child welfare professionals. Since then, however, the field has developed rapidly. The number of cases reported to agencies of all types has soared. Public awareness and concern about the problem, as reflected
in media attention, has intensified. More and more professionals and their academic counterparts have become interested...extensive literature on the subject has developed... (g)overnment funding has increased... (and) all this activity has given a boost to new scientific inquiry about the problem. (p.10)

In spite of the legal mandates, research, and treatment concerns, reporting of past or current abuse is still minimal (because of shame, embarrassment, fear of the perpetrator or loss of income, jealousy of the child, disbelief of the child and/or loyalty to the perpetrator, fear of family or repercussions, or lack of knowledge), therefore existing research is based upon those who do report (Courtois, 1988; Justice & Justice, 1979; Browning & Boatman, 1977; Renvoize, 1978; Weinberg, 1955; VanderMey & Neff, 1982). However, despite limitations upon reporting and availability of subjects, earlier research has been helpful in understanding and treating the sexually abused individual. Knowledge has been gained in many areas, including the following themes: implications for the development of the child and the child's subsequent performance as a parent; implications for the welfare of the child as an individual with the right to happiness and a "normal" childhood; implications pertaining to the unequal power distribution which allows the older, stronger parent to exploit the younger, weaker, dependent child; interest in accurately assessing the prevalence of the problem; determination to halt the abuse and provide services to the victim and perpetrators; and/or concern over the subsequent deviance (e.g. prostitution) and other behaviors precipitated by the abuse (VanderMey & Neff, 1982).

Current studies have refined, to a degree, the above issues, and, with the increased social awareness resulting in additional knowledge and understanding. Current studies reveal that about one-third of women and one out of ten men in North America have been sexually abused before they reach their mid-teens (Briere, 1989; Finkelhor, 1984; Peters, Wyatt, & Finkelhor, 1986, Russell, 1984). According to two studies, nearly half
of the women requesting counseling at an outpatient crisis intervention service and over two-thirds of one psychiatric emergency room sample had been sexually abused during their childhood (Briere & Runtz, 1987; Briere & Zaidi, 1988). The majority of victims were female, while the majority of perpetrators were male (Russell, 1986). Males are also sexually victimized, but in smaller percentages (Finkelhor, 1984), and tend to report the abuse less frequently (Briere & Runtz, 1988a).

When Russell (1984) did a random sample study of 930 victimized women from the general population, 54% claimed sexual abuse inside or outside the home prior to age 18, and 48% prior to age 14. The average age of victims was twelve, with the majority being less than age 17. The abuse was typically initiated between ages five and eight. (VanderMey & Neff, 1982). The majority of offenders were either family members or acquaintances (Courtois, 1988). The most common perpetrators were the father or stepfather, followed by any related male with a prior relationship (Edwards, 1984; Fritz, Stoll, & Wagner, 1981).

According to previous research, sexual abuse only rarely begins with rape and actual intercourse. The usual pattern is one of repeated and progressive sexual activity, and although most abuse does not involve violence, abuse still includes some sort of coercion and a misrepresentation of the relationship (Courtois, 1988). The child is manipulated by the unequal power in the relationship and by the perpetrator's strong desire to keep the activity a secret. In addition, studies show that most child sexual abuse continued for at least two years before it was reported (Savageau, 1985).

Family History of Sexual Abuse Victims

Victims of abuse have frequently reported common familial characteristics, including poorly defined boundaries (enmeshed and overinvolved in each other's lives to the extent of thinking, talking and feeling for each other (Cohen, 1983; Mitnick, 1986;
Peters, 1986; Sgroi, 1982; Savageau, 1985; Thorman, 1983). Because of poorly defined boundaries and diffused generational limits, often involving three generations or more, Cohen (1983) found that incest could be transmitted from one generation to the next through several patterns. This is evidenced by the behaviors found in the family, including depression, empathy defects, ambivalence regarding parenting, compulsive behavior, family mental illness, family violence, inappropriate sleeping arrangements, extreme favoritism shown to one child, overcrowding in the home, extreme lack of communication or indirect communication, and the family having no social or personal support (Cauwels, 1992; Clarkin, Marziali, & Munroe-Blum, 1992; Mitnick, 1986; Peters, 1986; Savageau, 1985; VanderMey & Neff, 1982).

Mitnick (1986) adds several risk factors found in the incestuous family system, including the presence of a stepfather, rather than father, and the absence of the mother from the home. Fifty percent of those reported as abused had stepfathers, and children with stepfathers were five times more likely to be abused. Causes suggested for this are dislocation and less supervision by the caretaking parent (Mitnick, 1986; Sgroi, 1982). A female is three times more likely to be abused when the mother is not in the home (Cohen, 1983; Canepa & Bandini, 1980). (Note: If the child does live with the mother, but the mother is punitive, emotionally distant or not close to the child, there is also one-and-a-half times the risk of victimization). Other risk factors include: (1) an imbalance between the education level of the mother and father (where the mother had not finished high school and the father had); (2) the child received no physical or emotional affection from the father, or the father is punitive, absent, exploitive, or indifferent, the risk for abuse is increased (Canepa & Bandini, 1980; Mitnick, 1986; Thorman, 1983).

Social isolation also can contribute to abuse within the family (Canepa & Bandini, 1980; Fargo Forum, 1985; Mitnick, 1986; Peters, 1986; VanderMey & Neff, 1982). Because of the social isolation, shame-based behavior, denial, and at times, moral
rigidity, a paranoid world view and a need for secrecy develop (Mitnick, 1986; Peters, 1986). Parent jealousy becomes overprotectiveness of the child in any or all outside activities and the child is sharply restricted in his/her contact with peers and adults outside the home. The world outside is seen as "the enemy" who would break up the family if they found out "the secret." (Sgroi, 1982), and the isolation is increased. "The parental incest family expends an enormous amount of energy upon denial. On the one hand, negative aspects of internal family functioning must be denied in order to be bearable...On the other hand, maintaining isolation requires that the outside world be perceived as hostile and threatening; this in turn requires denial of its positive and attractive aspects" (Sgroi, 1982, p. 50).

Consequently, in the light of the enmeshed boundaries and social isolation, followed by the confused power base of the system, all family members adjust to the established pattern of relationships and will act accordingly (Canepa & Bandini, 1980; Cohen, 1983; Pizzey & Dunne, 1980). Sgroi (1982) advises: "sexual abuse of a child by a single family member usually involves some degree of direct or indirect participation by other family members as well. For example, one family member may 'set up' a child to be victimized by another family member. However, incest is more often a result of indirect contribution by every family member..." (p. 50).

Cooper & Cormier (1982) found that the offender may have been a victim of sexual abuse in his/her youth. They may also experience poor impulse control, poor social skills, sexual dysfunction, addiction (alcohol and/or drugs), sexual deviance (including sexualizing of affection and other interactions, and exhibitionism), schizoid personality (evidenced by overcompensation or brutality), and a strong need for control (Canepa & Bandini, 1980; Cohen, 1983; Mitnick, 1986; Thorman, 1983).

Also, the mother frequently has a history of unresolved incest with her own father, and is often unable to prevent an incest relationship between her husband and daughter.
Because of her own dysfunctional background, she may lack the skills, experience, or ability to recognize the natural barriers in family life to properly parent her children (Cauwels, 1992; Clarkin, et al., 1992; Pizzey & Dunne, 1980). In addition, due to depression, passivity, sexual dysfunction, low self-esteem, and marital discord, may passively retreat from her role as wife, parent and caretaker (Canepa & Bandini, 1980; Mayer, 1983). As a result, the mother is frequently seen in research as weak, submissive, indifferent and emotionally distancing from the family (Savageau, 1985; VandenMey & Neff, 1982). Because of the dysfunctionality of the system and the unmet needs of the mother and father, there is often a role reversal between the mother and daughter (Edwards, 1984; Mitnick, 1986; Peters, 1986; Pizzey & Dunne, 1980; Sgroi, 1982). The parental power base of the triangle becomes imbalanced, with the daughter assuming more responsibility, and taking on the roles of mother and housekeeper (Cohen, 1983; Mitnick, 1986; Peters, 1986; Pizzey & Dunne, 1980; Sgroi, 1982; Thorman, 1983). The daughter may become the nurturing individual, or the one to whom the father may turn for emotional and sexual support (Pizzey & Dunne, 1980; Grolnick, 1983). The mother, feeling powerless, then relinquishes her position and leaves the father to be in control, thereby enabling the father to exploit his daughter without encountering resistance from other family members (Cohen, 1983; Sgroi, 1982; Thorman, 1983).

Additional research also suggests that daughters choose husbands who are immature and untrustworthy, like their fathers, and who, like them, may abuse their daughters (Justice & Justice, 1979; Cooper & Cormier, 1982). Once the values in a family allow transgression of the incest taboo, it is easier to break it in following generations (Cooper & Cormier, 1982).

Overall, the picture painted is one of a dysfunctional family maintaining an unhealthy homeostasis in order to survive (Cauwels, 1992; Clarkin, et al., 1992; Courtois, 1988; Mrazek, 1981).
Traumatic Effects of Abuse

Victimized children are at risk for developing a range of negative aftereffects, some mild, some life-threatening and severely debilitating. Browne & Finkelhor (1986b) found that approximately 40% of all victims suffer aftereffects serious enough to require therapy later on.

After the traumatic experience, the victim experiences three basic stages after the molestation: crisis, suffering, and resolution (Daugherty, 1984). In experiencing the trauma, Freud felt that the most essential predictor of the effects of trauma is the victim's perception of it's potential lethality and his or her subjective experience of helplessness, regardless of the objective reality (Freud, as cited in Kaufman & Wohl, 1992). He believed that although the child was not sufficiently developed to be able to understand and incorporate the traumatic event (s), the experiences still left an indelible mark. The memory of the trauma is then repressed but the associated feelings remain, although perhaps unconnected, to the original event (Kaufman & Wohl, 1992; Sgroi, 1982). Anna Freud, (cited in Furst [1967]), felt there were two aspects to determining the extent of the trauma: the suddenness of situations for which the individual has no time to prepare, and a visible result signifying the disruption of the ego organization. When an individual has experienced a trauma, a subsequent alteration of the individual's actions and demeanor are generally discernible. There appears to be a disturbance in the functioning of the ego, a breakdown in reality testing, rigidity of defenses, and the individual may respond with either a catatonic state of being or "frenzied, undirected disorganized behavior bordering on panic" (Furst, 1967, cited in Kaufman & Wold, p. x). Shengold (1979) felt that the child dissociates from the traumatizing event and loses contact with her or himself in the process of chronic and repeated abuse, in which a child is repeatedly and intentionally presented with toxic events that alternate with emotional neglect. This experience then organizes the defenses, the id, ego, and superego structures, the developmental process,
and the personality. "When one person uses his or her position to dominate another in order to squelch the other's uniqueness, integrity, and feelings, the result is an interference in the victim's ability to use logical thought and remain reality based. The victim's sense of identity is thereby profoundly altered" (Kaufman and Wohl, 1992, p. xi). The psyche is unable to cope, and a barrage of emotions strikes terror, resulting in a mutation of the child's previous defensive structure, range of affective responses, and cognitive processes.

The repetitive, amnesia-like (dissociative) states the child unconsciously invokes cause estrangement from his or her sense of self, omnipotence, and a sense of invulnerability, and increases the potential for overly compliant, pseudo-mature, behavior (Kaufman & Wohl, 1992; Sgroi, 1982; Ulman & Brothers, 1988). When the child attempts to make sense of the situation, he/she creates fantasy explanations and develops "meaning structures"—ways in which the person experiences him or herself in relation to others (Ulman & Brothers, 1988, p. 5). When the self is shattered, there is a frantic attempt at reconstitution, as the trauma has challenged "the self as center for organizing activities" (Ulman & Brothers, 1988).

When the child is then unable to gain mastery over the noxious occurrence and subsequent disillusionment of his or her omnipotence occurs, the child feels like a failure. Fantasies or illusions of self power are pivotal antecedents to the development of a healthy personality organization, and in instances of trauma, they are not gradually transformed into an authentic feeling of a sense of strength within the environment, but rather to a sense of powerlessness and impotence (Kaufman & Wohl, 1992).

Sexual abuse trauma has frequently, because of the manifested poor impulse control, high anxiety, acting-out behaviors, splitting, intensification of aggression, and sublimation difficulties, been linked with Borderline Personality Disorder (Everstine & Everstine, 1989). At a time when the child normally introjects healthy controls and self-
soothing functions, the child's ego is flooded instead with anxiety and increasingly tenuous impulse control. In order to maintain a positive internalized image of the exploiter and/or the nonoffending parent, the child begins to separate or split apart positive and negative attributes, enabling them to ward off more widespread anxiety and to preserve the integrity of the ego (Kaufman & Wohl, 1992). This results in a regression in the ability to express emotions, resulting in an inability to differentiate affects, psychological numbness, or general affective disturbance (Krystal, 1988). In a world where emotions help self-monitoring, to provide signals to generate specific behaviors and to set a path of direction for actions, these individuals are unable to differentiate between such emotions as happiness, sadness, hunger, or exhaustion, settling for a generalized sense of discomfort and physical problems instead (Krystal, 1988).

Janoff-Bulman (1985, p. 21) believed that trauma is made of "the shattering of any one of three basic assumptions about self and the world... (1) the belief in personal invulnerability; (2) the perception of the world as meaningful and comprehensible; and (3) the view of oneself in a positive light". When the child cannot make sense of a trauma, there is an off-centering of reality and an induced state of cognitive dissonance. In order to rectify this, the child must sacrifice his/her view of self at the cost of self-esteem or "the child must relinquish his or her view of the world as a place he or she can understand" (Kaufman & Wohl, 1992, p.xii).

Krystal (1988) felt that trauma caused children to undergo a permanent change in their affective lives, and in their attempt to cope, they became numb to their own feelings. Their affects are then converted into psychosomatic symptoms, a state of helplessness, and other problems. Trauma,"the first part of dying", murders an integral part of the self, and a state of passivity results (Krystal, 1988, p. 102). "When children experience themselves as totally helpless, it changes their self-perception and their
perceptions of the world permanently. This leads to feelings of shame and a lifestyle of despair" (Kaufman & Wohl, 1992, p. xiii).

Krystal also explains that when the child is traumatized, the child's capacity to initiate activities and use his/her mind for survival are also sacrificed (1988). Finkelhor (1986) concluded that latency (ages 5 to 10 or 11), when the child is expected to develop inner controls over instincts and impulses, and to incorporate societal values, appears to be the most common time for the sexual abuse to begin. Instead of further developing the personality, the existing child is "murdered", and a new child emerges who may be jaded and damaged (Kaufman & Wohl, 1992; Shengold, 1979).

Research studies included in Canepa & Bandini's report (1980) showed the victims displaying emotional weakness, moodiness, and depression. They experience feelings of guilt, anger, fear, shame or self-blame, and feel robbed of their childhood (also, Blumberg, 1984; Fritz, et al., 1981; Pizzey & Dunne, 1980; Sgroi, 1982; Zager, 1982). They frequently have a need for affection, lack self-control and motivation, are unable to plan the future, and reveal a possible tendency to lie, impulsiveness, instability, rebellion, a deficit of criticism and moral sense. They frequently have somatic complaints and have personality, body and self-concept problems (Brown & Finkelhor, 1986b; Peters, 1986; Sgroi, 1982; VanderMey & Neff, 1982). They may also be slightly delayed in emotional and intellectual development (Canepa & Bandini, 1980; Peters, 1986; Zager, 1982).

Symptoms may appear in various combinations, including hallucinations, delusions, recurrent obsessional thoughts, and dissociation, some reaching psychotic proportions (Gelinas, 1983). Cognitive processes, intrusive thoughts, flashbacks, nightmares, overwhelming anxiety, poor concentration, and attention difficulties occur frequently (Butler, 1978; Donaldson, 1983; Kaufman & Wohl, 1992). The victims may have suicidal thoughts or gestures, or be self-destructive (e.g. they may self-mutilate, use
drugs, alcohol, food, or act out sexually, or participate in dangerous behavior) (Brothers, 1982; Donaldson, 1983; Finkelhor & Browne, 1986b; Peters, 1986; Savageau, 1985; Sgroi, 1982a; Shapiro, 1987).

Trust, in others, is violated, and the world may be seen as unsafe, malevolent, and uncontrollable (Kaufman & Wohl, 1992). Self-trust, the ability to modulate one's affects, use good judgment, set realistic goals, manage anxiety, experience the self as lovable, have the ability to comfort and empathize with one's self, and work toward self-realization, is destroyed (Brothers, 1982). As a result, victims often become more socially withdrawn and uncomfortable in social situations (Becker, Skinner, Able, & Treacy, 1982; Brown & Finklehor, 1986b; Peters, 1986; Sgroi, 1982a; VanderMey & Neff, 1982; Washington County Human Services, 1985). They also may, at times, show a tendency to aggression and anti-social behavior. They frequently feel emotional ambivalence towards the father after the abuse, and experience a dislike for the parents (Canepa & Bandini, 1980; Peters, 1986; Zager, 1982). They often ventilate rage on small people, display delinquent behavior and school problems and, at times, become abusers themselves (Ellenson, 1985; Mitnick, 1986; Peters, 1986). They also may exhibit pseudoadult behavior, as well as a tendency to have older friends.

Gender Differences

Males and females differ in several areas, especially in social training, with regard to sexuality and aggression, responses to victimization, and expressions of emotional pain (Briere, 1989). Males are socialized to use sex as a vehicle for dominance, self-assertion, and immediate pleasure (Malamuth & Briere, 1986), whereas women are trained to see sex as a way to build a relationship, ensure protection and safety, express affection, and experience loving contact (Briere, 1989). Victimization is antithetical to masculinity, since the abuse implies weakness and "being done to rather than doing to"
(Briere, 1989, p. 154). In addition, the abuse is frequently done by another male,
combining the belief that he may be homosexual in addition to being weak (Johnson &
Shrier, 1987; Maltz & Holman, 1987; Simari & Baskin, 1982). Therefore, the
developing male child may strive to reaffirm the power or masculinity he believes was
compromised by the abuse-potentially leading to his acting out aggressively towards
others (Briere, 1989; Johanek, 1988).

Briere (1988, 1989) found, based upon recent data and clinical experience, that
much of post-sexual-abuse trauma manifests itself equally in males and females.
However, most males grow up learning to suppress verbal expressions of pain or
discomfort, thus keeping them from sharing their abuse or delaying treatment, whereas
females are more likely to be reinforced for communicating their feelings to others
(Briere, 1989). A UCLA study revealed that male abuse survivors may display
psychological symptom patterns roughly equivalent to those of females and may produce
similar MMPI profiles (Kelly, MacDonald, Kelly & Waterman, 1987). However, the
male survivor tends to deny, suppress, and/or intellectualize his abuse history, reducing
the amount of catharsis and emotional insight he is able to accomplish during treatment
(Briere, 1989). Additionally, he may choose to act out impulsively (Stukas, 1988, April).
Finally, males in our society are less likely to be punished for anger or expressions of
hostility, therefore anger frequently becomes the primary or only emotion available for
expression (Stukas, 1988). "Weaker" emotions such as fear, guilt, shame, or
powerlessness, are then automatically funneled into the single affect of anger or rage
(Briere, 1989, p. 158). The female, on the other hand, has been trained to avoid anger
and to express only the less threatening affective domains, such as sadness or fear
(Agosta & Loring, 1988).
Posttraumatic Stress Disorder

The DSM-III-R (Diagnostic and Statistical Manual of Mental Disorders-Revised-American Psychiatric Association, 1987; p. 247) defines Post-traumatic stress disorder (PTSD) as "the development of characteristic symptoms following a psychologically distressing event that is outside the range of usual human experience...The stressor...is usually experienced with intense fear, terror, and helplessness." The characteristic symptoms involve reexperiencing the traumatic event, avoidance of stimuli associated with the event or numbing of general responsiveness, and increased arousal. The most common determinants of the degree of PTSD include a threat to the subject's life; that the trauma may be experienced while the subject is alone or in the company of others; that stressors include natural disasters, accidents, and that they can be reexperienced in a variety of ways, including recurrent or intrusive memories, distressing dreams, or the "reliving" of the traumatic event. There can be intense psychological distress when the subject experiences an event that resembles or symbolizes the traumatic event. There may also be persistent avoidance of associated stimuli, or a numbing of general responsiveness. The person may make deliberate efforts to avoid thoughts or feelings about the traumatic event and about activities or situations that arouse recollections of it. According to the DSM-III-R, diminished responsiveness to the external world, referred to as "psychic numbing" or "emotional anesthesia", usually begins soon after the traumatic event. The person may feel detached from others, lose the ability to become interested in previously enjoyed activities or lose the ability to feel emotions of any type.

Persistent symptoms following the trauma may include difficulty with sleeping (recurrent nightmares, difficulty falling or staying asleep, etc.), hypervigilance, and exaggerated startle response. There may be increased aggression and irritability, difficulty in concentration or in completing tasks, and fear of losing control. The person
may become impulsive, suddenly changing place of residence or other aspects of her/his lifestyle. Many of these symptoms may be intensified or precipitated when the person is exposed to situations or activities that remind them of the original trauma.

Associated symptoms of depression and anxiety may be present, and may be sufficiently severe to be diagnosed as an Anxiety or Depressive Disorder. In addition, there may be symptoms of Organic Mental Disorder, including failing memory, emotional lability, headache, and vertigo.

PTSD is primarily associated with veterans of military combat, and other individuals who have experienced other traumatic events such as serious crimes (rape, kidnaping), accidents (car, airplane), and disasters (floods, large fires) (Janoff-Bulman, 1985). Reactions include shock, confusion, helplessness, anxiety, and fear (Gil, 1990).

**PTSD and Sexual Abuse**

Several terms have been suggested to describe the psychological effects of sexual abuse, including traumatic neurosis (Gelinas, 1983), stress-response syndrome (Horowitz, 1986), post-sexual abuse syndrome (Briere, 1984, 1989), child sexual abuse accommodation syndrome (Summit, 1983), and DESNOS (Disorder of Extreme Stress Not Otherwise Specified), a diagnosis being considered for the future DSM-IV (Herman, 1992a). In addition, a number of writers have suggested that sexual abuse during childhood may produce either chronic or delayed PTSD in later life (Blake-White & Kline, 1984; Briere, 1989; Briere & Runtz, 1987; Donaldson & Gardner, 1985; Gelinas, 1981, 1983; Goodwin, 1984; Herman, 1992a; Lindberg & Distad, 1985a; van der Kolk, 1987).

The majority of modern researchers acknowledge that sexual victimization is a frightening, painful, and psychologically overwhelming experience (Briere, 1989), and a broad review of the sexual abuse literature emphasizes the appropriateness of viewing
severe post-sexual-abuse trauma as a specific, rather than general, form of PTSD (Briere, 1989; Gil, 1990; Finkelhor, 1986; Walker, 1988). Finkelhor (1979) found that in a study involving 530 university women, 58% reacted to victimization with fear, and 26% experienced shock. Russell (1986), in a community sample of 930 women, found that 80% of those who had been abused were "somewhat" to "extremely" upset, and that 78% reported long-term negative effects of the abuse experience. Several studies have been completed on psychic trauma and response during childhood (Ayalon 1983; Black, 1982; Eth & Pynoos, 1985; Newman, 1976). Symptoms found include the sense of being overwhelmed and threatened as they remember early trauma, intrusive flashbacks, physical sensations (throbbing, stinging, internal pain), or emotionality. The symptoms are disruptive, and distressing, and interfere with the client's functioning and sense of emotional well-being (Gil, 1990).

Lindberg & Distad (1985a), for example, found that each of the 11 incest victims they studied described symptomatology that met the Diagnostic and Statistical Manual of Mental Disorders-Revised (DSM-III-R, 1987) criteria for PTSD. Gelinas (1983) described the abuse victim as one experiencing dissociative symptoms, substance abuse, impulsivity, self-mutilation, and suicidality, all characteristics of PTSD. Finkelhor (1986) believes that the label of PTSD is overused and ineffectual since it describes only a limited number of symptoms typically associated with sex abuse victims. Instead, he offers his "Traumagenic Dynamics in the Impact of Sexual Abuse", as a more comprehensive theoretical framework which gives specific dynamics associated with the impact areas of Traumatic Sexualization, Stigmatization, Betrayal, and Powerlessness.

Lerman (1992) observed that there were three broad areas of disturbance that appeared to transcend simple PTSD: 1) more complex, diffuse, and tenacious symptoms; 2) characteristic personality changes, including deformations of relatedness and identity; and 3) vulnerability to repeated harm, both self-inflicted and from others. She
recommended that, because of these differences, the DSM-IV include a classification of a spectrum of posttraumatic disorders, including Acute Stress Disorder, PTSD, and DESNOS (Herman, 1992a). Bryer and his colleagues (1987) found that, in a psychiatric setting, women with histories of physical or sexual abuse had significantly higher scores than other patients on standardized measures of somatization, depression, general and phobic anxiety, interpersonal sensitivity, paranoia, and "psychoticism". Briere (1988) found that outpatients who had a history of sexual abuse had a greater rate of insomnia, sexual dysfunction, dissociation, anger, suicidality, self-mutilation, drug addiction, and alcoholism.

Walker (1988) recommends making a diagnosis including PTSD, and other appropriate diagnoses based upon the client's personality style, emotional state, and level of functioning. The diagnosis of PTSD can be helpful to the client by assisting to normalize her/his responses, and transferring them from confusion and fear of loss of control, to a different perspective and reinterpretation of events and aftereffects. In addition, Walker (1988) suggests that by using a dual diagnosis, the therapist is better able to conceptualize the treatment process, and ensure that related personality disorders and other diagnoses receive attention as well. The treatment plan can then be based on all of these diagnoses and their determined severity.

Briere (1988) reported that, in a random clinical study of 133 female sexual abuse victims, 43% reported sexual contact from a parent or stepparent, 77% had been penetrated orally, anally, or vaginally, and 56% were also physically abused. Of this sample, 17% reported especially bizarre abuse, involving ritualistic sexual activities, multiple simultaneous perpetrators, sexual involvement with animals, insertion of foreign objects, and/or intentional torture.

Herman, Russell, & Trocki (1986) found that long-term psychological trauma was especially likely when incest victims had experienced severe victimization, including
oral/anal/vaginal penetration, abuse occurring over an extended period of time, or especially violent abuse. Many survivors of childhood sexual victimization describe intrusive memories of or flashbacks to the abuse, as well as recurring nightmares (Briere & Runtz, 1987; Gelinas, 1983; Lindberg & Distad, 1985a & b). The flashbacks can involve all of the senses, including sudden visual, auditory, olfactory, gustatory, or tactile memories of the assault, feeling someone's hand on their leg, or "seeing" the perpetrator's face. These periods of reliving the abuse may be so sudden and so compelling as to produce a temporary break with the current environment, resulting in what may appear to be hallucinations or psychosis (Gelinas, 1983). Nightmares may replay actual scenes, involve shadowy, threatening figures by one's bed, attacks by coiling snakes or snarling monsters, frightening pursuits, and gory mutilation or disfigurement (Briere, 1989). In addition, extreme feelings of fear, helplessness, or paralysis, and chronic sleep disturbance may be experienced in these "post-traumatic nightmares" (Hartmann, 1984).

A variety of other PTSD symptoms are frequently exhibited in victims, including sleep disturbance, difficulties in maintaining concentration, memory problems, irrational guilt, hyperalertness, and an intensification of symptoms when the victim is exposed to situations or stimuli that resemble the original traumatic event (Gil, 1989; Briere, 1989; Finkelhor, 1986). According to researchers, sexual abuse survivors are approximately twice as likely as nonabused individuals to have sleep problems (Briere & Runtz, 1987; Brown & Finkelhor, 1986b; Sedney & Brooks, 1984). Sleep is experienced by the survivor as a time of maximal vulnerability, when vigilance and the defenses are at their lowest and when frightening dreams are likely. This sense of helplessness is compounded by the likelihood that the abuse occurred in darkness and/or in the bedroom.

Sexual abuse victims usually suffer from anxiety, resulting in high autonomic arousal and extreme alertness to the possibility of danger. This tends to coexist with an inability to concentrate for extended periods of time, due to difficulty in focusing one's
attention when needed. Although there is little mention of this symptom in research, such chronic fearfulness is even more common in those who have been physically abused as well as sexually abused (Briere, 1989).

**PTSD, Sexual Abuse, and Self-Mutilation**

Deliberate self-harm seems to be significantly linked to a history of childhood abuse and repeated trauma, developing most commonly in victims of early childhood abuse (Briere, 1988; Herman, 1992). Herman (1992) found that self-injury developed in prolonged and repeated trauma, and suggested a separate posttraumatic stress diagnosis, DESNOS (Disorder of Extreme Stress Not Otherwise Specified), for those who had been repeatedly abused.

Self-mutilation occurs when the individual causes physical damage to his or her body, and may be an especially good example of the mixture of adaptive and self-punitive qualities of certain survivor behaviors. Intentional yet nonsuicidal damage may be inflicted by scratching, burning oneself with matches or cigarettes, biting, pulling out one’s hair, cutting or piercing, crashing their auto, breaking bones, slapping or punching, picking previous wounds, pin-sticking, swallowing sharp objects (glass, nails), self-starvation, bulimia, substance abuse, hitting walls with their head or hands, etc., or by other means (Favazza, DeRosear, & Conterio, 1989; Favazza & Conterio, 1988; Favell, Azrin, Baumeister, Carr, Dorsey, Forehand, & Others, 1982). These behaviors although once adaptive during the abuse experience, now become "self-destructive" (reflecting abuse-related self-hatred, desire for punishment, or suicidality) (Briere, 1989).

Individuals who mutilate themselves may do it chronically, ritualistically, or sporadically. Survivors who self-mutilate often describe a period of escalating guilt, self-criticism, and increasing disgust with self just prior to self-injury, leading to an overwhelming desire for punishment (Briere, 1989). After self-injury, the negative
thoughts usually abate and a period of calm and almost palpable relief may ensue.
Unfortunately for some chronic self-mutilators, this pattern is likely to recur in the near future with the onset of "new" guilt or self-derogating thoughts. Most hide the evidence, but a few flaunt it. Some employ very dramatic methods while others simply scratch too much (Gil, 1990).

Favazza, et.al., (1989) found that the typical profile of a self-mutilating individual was that of a "28-year-old, single, Caucasian female who first started mutilating herself at age 14. Her preferred method is self-cutting, but she has probably also burned herself, hit herself, interfered with wound healing, or scratched her skin severely. She has engaged in these behaviors on more than 50 occasions, the most recent act occurring in the month prior to completing the survey. She has received outpatient therapy for her self-harm (a median of 75 sessions), and there is a 50% chance that she has received inpatient treatment" (p. 354).

The syndrome typically begins in adolescence and lasts for 5-10 years, although it may persist for decades (Favazza, 1989a). Although the will appears to be in control initially, eventually the symptoms seem to "assume a life of their own and overtake patients' ability to choose their behavior freely" (Favazza, et al, 1989, p. 359). At times, this results in accidental suicide. Adolescents and adults who were abused as children tend to act out their feelings in response to the stress and internal conflict in a number of behaviors that are self-destructive or harmful to themselves or others (Briere, 1989; Favazza & Conterio, 1988; Favazza, et al., 1989), including: truancy and other school problems (DeFrancis, 1969; Reich & Gutierrezes, 1979; Runtz & Briere, 1986), running away from home (McCormack, Janus, & Burgess, 1986), aggression (Bag’ley, 1984; Reich & Gutierrezes, 1979), drug and alcohol abuse (Bagley, 1984; Briere & Runtz, 1987; Briere & Zaidi, 1988, August; Herman, 1981; Miller, Downs, Gondoli, & Keil, 1987), delinquency or criminality (Ross, 1980; Reich & Gutierrezes, 1979; Runtz & Briere,
1986), and self-mutilation (Briere, 1988; Briere & Zaidi, 1988, August; deYoung, 1982; Goodwin, Simms, & Bergman, 1979; Lindberg & Distad, 1985b).

Persons who harm themselves do so for a number of reasons, including the termination of dissociation, distraction from painful memories or flashbacks, reassurance of their being alive, and to increase their sense of autonomy (Briere, 1989; Favazza, 1987; Favell, et al. 1982). Individuals who dissociate may self-mutilate in order to experience pain as evidence that they are alive. When the mind splits from the body, and the person becomes the observer, the body can seem unreal and robotlike. These individuals then cut themselves simply to prove that they are alive and really flesh-and-blood human beings (Briere, 1989).

Sexual victimization (especially incest and chronic abuse) frequently distorts subsequent perceptions of self and the world. These cognitive distortions may then produce behaviors that are situationally inappropriate. This may include an individual’s view of him/herself as bad, unworthy, and unlovable, in combination with a perception of others as untrustworthy and the world as dangerous. Even certain forms of self-injurious acting out, including alcohol and drug abuse, and self-mutilation, may ensure social avoidance, reduce stress, and decrease feelings of helplessness through direct action (Reich & Gutierres, 1979; Lindberg & Distad, 1985b).

Some abuse victims associate pain with love, therefore pain is induced to feel close to the abusive parent or individual. Self-mutilation can also be a form of self-punishment, where the victim, believing that he or she is bad inside and out, wishes to destroy the body and the soul (Morgan, 1979). Favazza (Favazza, et al., 1989, p. 358) proposed the concept of “nonfatal deliberate self-harm”, which has now been elaborated into a “deliberate self-harm (DSH) syndrome”. Favazza sees this as “an impulse control disorder characterized by repetitive, low-lethality, self-injurious behavior without conscious suicidal intent” (p. 359). The behavior provides temporary relief from
symptoms such as mounting anxiety, racing thoughts, depression, and depersonalization (Favazza, 1989a).

Nonlethal suicidal behavior may represent a cry for help in individuals who believe themselves to have no other effective way to communicate psychological pain, given their perceived lack of power and undeservingness in more conventional contexts (Briere & Runtz, 1986). Finkelhor and Browne (1985) trace the inward punishment of self to the low self-esteem and self-hatred in the sexual abuse survivor, who may blame herself for the abuse and perceive herself as evil, unattractive, and dirty.

The ultimate motives for self-mutilation and suicide may be notably different for the sexual abuse victim, in that victims with suicidal ideation may report an ongoing preoccupation with dying and death, usually as a result of feelings of helplessness, hopelessness, and a combination of anger at self and others. These suicidal thoughts and impulses are often quite chronic, dating back to the time of the first incident of sexual abuse (Briere & Runtz, 1986). The self-mutilator, on the other hand, is struggling to stay alive. The self-injury is often an attempt to block or interrupt negative thoughts or feelings (dissociation, rage, extreme dysphoria, overwhelming guilt, etcetera) and thus may be an attempt to survive incapacitating symptoms rather than ending life (Briere, 1989; Butler, 1978). At times, however, this may result in accidentally ending that life.

Even in cases where self-mutilation serves as self-punishment, it is often described by sexual abuse victims as a substitute for more lethal behaviors. Thus it can be a sign of continuing struggle for symptom relief and survival and therefore may be, to some degree, dealt with differently from potentially lethal behaviors (Briere, 1989).

Finally, some individuals desire much needed attention, and they have learned that they will get it if they hurt themselves. Injuries may be followed up with attention from adults, doctors, nurses, etcetera, including medication and affirmation that they are important.
The Use of the MMPI and Other Instruments in the Assessment of Victims of Abuse.

Because of the relatively recent involvement of mental health professionals in child maltreatment and its effects, published psychological testing data on sexual abuse survivors is quite sparse (Briere, 1989; Gil, 1990). Few studies have used standardized instruments, preferring instead to use clinical case studies, unstructured psychiatric interviews, and mental health agency files and reports (Alexander, et al., 1989; Briere, 1989; Scott & Stone, 1986a & b; Tong, Oates, & McDowell, 1987). However, many previous researchers have recommended the use of standardized instruments for both assessment and treatment purposes (Briere, 1988; Walker, 1988). Abuse-specific psychometric results might allow psychologists to (a) identify previously undetected sexual abuse survivors by virtue of their responses on standardized tests and/or (b) determine the extent and type of abuse-related effects in individuals already identified as having been molested in childhood.

Several standardized instruments (Beck Depression Inventory, MMPI, Rorschach, etcetera), have been used in a minimal number of studies, however, these are not specifically associated with sexual abuse. They are not as sensitive to the effects of abuse, therefore using them may dilute the sense of the impact of the trauma, and may make it difficult to conduct sensitive analyses of the differential impact of different kinds of abuse (Finkelhor, 1986; Walker, 1988; Blume, 1990). One may find elevated scores on certain subscales, and take this as a sign of the pathological effect of abuse, without a clear understanding of why the abuse should have that impact. Instead, instruments that are abuse-specific need to be created and correlated with the more standardized instruments (Berliner, 1987, April; Briere, 1987, April; Conte, 1987, April; Finkelhor, 1987).
Previous MMPI Results

Several researchers have used the MMPI, and have found disproportionately high numbers of 4-8 profiles in clinical samples of survivors (Scott & Stone, 1986a; Tsai, et al., 1979). Scott & Stone (1986a) found adult victims to have significantly higher non-K-corrected T-scores than adolescent victims.

Tsai et al. (1979), in assessing three groups of women, two of which had a history of childhood molestation, found that the clinical molestation group (those who had been molested and who had sought therapy) were significantly less well adjusted on the MMPI (T > 70 on Scales 4 and 8). The clinical group was also more problematic regarding psychosexual functioning. There was no significant difference between the two molestation groups on whether the molestation was incestuous, age at first molestation, or time elapsed to disclosure, however they did differ on variables related to duration, frequency, and severity, with the clinical group having been abused longer and more frequently, with more attempts at vaginal intercourse (Tsai, et al., 1979). Briere (1989) also suggested that clients with severe sexual abuse histories are likely to present with MMPI elevations on Scales 4 (Pd) and 8 (Sc), followed by, in some cases, a high 2 (D) and/or 9 (Ma).

Tsai et al. (1979) summarized the following known concomitants of a 4-8 MMPI pattern: a) a history of poor familial relationships; b) problems stemming from early establishment of an attitude of distrust toward the world; c) poor social intelligence and difficulty in becoming emotionally involved with others; d) sexuality seen as a hostile act through which anger is released; e) low self-concept; and f) a characteristic pattern of choosing men inferior to themselves in relationships. The authors also noted that "Such features of the 4-8 profile in general are consistent with observations made about women in therapy who were sexually molested in childhood..." (p.414). Table 1 displays findings of several studies involving victims of abuse.
In addition to a 4-8 scale configuration, it was Briere's impression that the MMPI responses of adults molested as children frequently contain an unusually high number of critical items, especially in terms of sexual issues (item #s 20, 37, 69, 74, 133, 179, 297) and familial discord (item #s 21, 96, 137, 212, 216, 237, and 245) (1989). Meiselman (1980) and Roland, Zelhart, & Cochran (1985) found that a number of items in the MMPI are answered differently by women who reported histories of early sexual abuse. Roland, Zelhart, & Dubes (1988) reported that these items might constitute a separate scale that would classify more than 73-84% of the women (using a cut-off score of 29, the minimum number of items in the subscale scored in the specified direction). However, they also found that there was considerable misclassification (29%) of the group who reported abuse. They advised that it was likely that some of the women who reported no history of abuse had actually experienced assaults but could not remember the experience (Roland, Zelhart, & Dubes, 1988).

### Table 1

**Frequency of MMPI Codetypes in Women Who Were Child Abuse Victims**

<table>
<thead>
<tr>
<th>Authors:</th>
<th>N</th>
<th>Codetypes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briere &amp; Zaidi (1989)</td>
<td>14</td>
<td>Elevated 4, 8; Also 2, 9</td>
</tr>
<tr>
<td>Scott &amp; Stone (1986a)</td>
<td>27</td>
<td>48/84 49/94 68/86 89/98</td>
</tr>
<tr>
<td>Scott &amp; Stone (1986b)</td>
<td>31</td>
<td>48/84 49/94 68/86 89/98</td>
</tr>
<tr>
<td>Tsai, et al. (1979)</td>
<td>30</td>
<td>T-scores for 4 &amp; 8 &gt;70</td>
</tr>
</tbody>
</table>
Previous Use of the MMPI in Research Regarding PTSD

MMPI clinical studies of patients with Post-traumatic Stress Disorder (PTSD) are rare, in comparison to other studies conducted on other diagnostic categories (Greene, 1988). There are several reasons for this (Penk, et al., 1988), including the fact that descriptive criteria for diagnosing PTSD were formulated only recently (DSM-III: American Psychiatric Association, 1980). Descriptive criteria, and techniques and measurements for diagnosing PTSD are not firmly fixed, and may continue to be revised as additional research is completed (the criteria have been revised for the DSM-III-Revised as well: American Psychiatric Association, 1987). Also, the MMPI was not designed to formulate diagnoses or to perform differential diagnosis, but rather was designed to measure adjustment and problem specification (Hathaway & Meehl, 1951), and PTSD-classified patients were not taken into consideration in the scale construction or subsequent development (Penk, et al., 1988). Even the current revision of the MMPI (MMPI-2) does not increase MMPI item content for PTSD criteria (Dahlstrom & Butcher, 1987). In addition, PTSD is not like other disorders in that it requires the clinician to assess the impact of an environmental event (Penk, et al., 1988). Therefore, the clinician must measure both the trauma and the person's phenomenology of the trauma, often requiring consultation with significant others to verify that a trauma was experienced (Penk, et al., 1988). PTSD can happen to anyone, and even people without a history of traditional psychopathogenic childhood indicators need to be assessed for histories of traumatic experiences. Finally, untreated or unsuccessfully treated PTSD may lead to complications and/or additional forms of psychological maladjustment. The person may avoid treatment in order to avoid the symptoms, only to have the same symptoms resurface when new stressors or trauma provoke them. Although PTSD is ranked with the anxiety disorders, it may be called a delayed stress syndrome because of
the postponement of treatment. As a result, the clinician may not see a person with PTSD until a secondary set of symptoms have developed (Penk, et al., 1988).

Most MMPI research studies have focused on or are limited to Vietnam and other combat veterans. Very little has been published regarding non-combat forms of trauma, including sexual abuse. Penk, et al. (1988) suggested that each form of trauma may require its own unique form of clinical research. Researchers also have recommended additional research improvement, including adequately identifying demographic information, controlling for other Axis I (or Axis II) disorders, concentrating on MMPI profile validity, controlling moderator variables, and larger sample sizes (Briere, 1989; Finkelhor, 1986; Penk, et al., 1988).

Several studies have assessed the full complement of PTSD criteria with the MMPI. Roberts, Penk, Gearing, Robinowitz, Dolan, & Patterson (1982) controlled for multiple variables, such as disability, socioeconomic status, age, and ethnicity, and found significant differences between substance abusers with combat experience and those without combat experience. Combat veterans showed greater social alienation (Scale 8), more social introversion (Scale 10), greater naivete' about psychological symptoms (L), and higher emotional arousal (Scale 9). Fairbank, Keane, and Malloy (1983) found that a PTSD group significantly differed from other psychiatric patients and a normal control group, displaying elevated 2-8/8-2 profiles, associated with anxiety, depression, agitation, sleep disturbance, somatic symptoms, fear of loss of control, guilt, and avoidance of close interpersonal contact. Keane, Malloy, & Fairbank (1984) suggested that most of the differences between PTSD and other psychiatric illnesses could be summarized in a decision rule identifying PTSD based on Scale F higher than a T-score of 66, Scale 2 (D) higher than a T-score of 78, and Scale 8 (Sc) higher than a T-score of 79. The direction of difference is toward more avoidance ways of coping with problems. The findings of these and additional studies are shown in Table 2.
Table 2

Mean Elevated MMPI Clinical Scales in Patients Meeting All DSM-III PTSD Criteria

<table>
<thead>
<tr>
<th>Authors:</th>
<th>N</th>
<th>Clinical Scales (&gt;/70 T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burke &amp; Mayer (1985)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD inpt. psych</td>
<td>30</td>
<td>8-2-7-9-4-6-1-3</td>
</tr>
<tr>
<td>PTSD outpt. psych</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>Butler et al. (1986)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD med. pat.</td>
<td>16</td>
<td>2-8-7-1</td>
</tr>
<tr>
<td>Non-PTSD med. pt.</td>
<td>18</td>
<td>WNL</td>
</tr>
<tr>
<td>Fairbanks et al. (1983)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>12</td>
<td>8-2-1-7-4-3-6</td>
</tr>
<tr>
<td>Normals</td>
<td>12</td>
<td>WNL</td>
</tr>
<tr>
<td>Foy et al. (1984)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>17</td>
<td>8-2-7-4-6-1-3</td>
</tr>
<tr>
<td>No PTSD</td>
<td>19</td>
<td>8-4-2</td>
</tr>
<tr>
<td>Hyer et al. (1987)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>26</td>
<td>8-2-7-1-6-3-4</td>
</tr>
<tr>
<td>NonCombat</td>
<td>25</td>
<td>2-4-7-8-1</td>
</tr>
<tr>
<td>Keane et al. (1984)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD Psychiatric</td>
<td>100</td>
<td>6-2-8-1-7-3-4</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>100</td>
<td>8-2-7-4-6-1-3</td>
</tr>
<tr>
<td>Kulka et al. (1986)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past PTSD</td>
<td>9</td>
<td>Spike 4</td>
</tr>
<tr>
<td>PTSD only</td>
<td>14</td>
<td>2-8</td>
</tr>
<tr>
<td>Axis I/No PTSD</td>
<td>14</td>
<td>4-2</td>
</tr>
<tr>
<td>Axis I/PTSD</td>
<td>57</td>
<td>8-2-7-6-4-1-3</td>
</tr>
<tr>
<td>Roberts et al. (1982)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>90</td>
<td>8-2-4-7-6-9-1-3</td>
</tr>
<tr>
<td>No PTSD</td>
<td>91</td>
<td>4-9</td>
</tr>
</tbody>
</table>

Note: "WNL" indicates within normal limits (40-70 T-score).
Summary.

Taken together, the empirical and clinical literature on the long-term effects of childhood sexual abuse leaves little doubt that such victimization can be quite harmful and long lasting (Briere, 1989). Sexual abuse usually results in injury to a child who grows up to be a traumatized adult. The extent of this injury appears to be a function of a large number of variables, including: age of first abuse; type, duration, and frequency of abuse; interpersonal resources available to the victim; relationship of offender (i.e., father, brother, teacher, et cetera); reactions and response of others to the abuse disclosure; and whether physical force was involved.

Despite the complexity of such mediating variables, very few studies performed in the last ten years show any form of childhood sexual abuse to be benign or harmless (Briere, 1989; Browne & Finkelhor, 1986b). Because of the similarity of symptoms, including self-mutilation, many victims are now recognized as having experienced post-traumatic stress disorder or syndrome (PTSD) or Borderline Personality Disorder.

In addition, although there has been considerable research regarding Borderline Personality Disorder, little research has been done regarding the use of standardized instruments, like the MMPI, in assessing the characteristics of sexual abuse victims who may or may not have experienced self-mutilating behavior. In previous studies, sexual abuse victims who self-mutilate (and may have experienced more trauma) have been combined with those who do not self-mutilate, to result in confused findings which may or may not be indicative of victims who do or do not self-mutilate. As a result, attempts at treatment have been essentially the same for both groups. Some studies have shown elevated scales 4 and 8 (Scott & Stone, 1986a; Roland, & Others, 1989) as primarily representing sexually abused populations, while borderline personality studies have
indicated a mean codetype of 8-2-4, with additional elevations on scales F, 6, and 7 (Greene, 1988; Kroll, Sines, Martin, Lari, Pyle, & Zander, 1981; Snyder, Pitts, Goodpaster, Sajadi, & Gustin, 1982). However, considerable heterogeneity exists within the studies and no specific single codetype has been consistently identified in either population (Greene, 1988).

Due to the varied symptomatology, there is a need for the two groups to be evaluated separately, rather than combining and treating them as being the same population, with identical characteristics and behaviors. Additional research, involving the revised MMPI-2, should be attempted in order to differentiate between these two groups, as well as those diagnosed with PTSD and personality disorders. Previous researchers also recommended that, not only the MMPI-2 basic scales (validity and clinical) be reviewed, but also the content, special scales and critical items should be examined in order to clarify the interpretation of the results and improve treatment related to abuse (Briere, 1989; Roland, et al., 1988, 1989).

Finally, it has been recommended in earlier research that additional instruments, designed specifically to assess behaviors and characteristics related to sexual abuse trauma, be used in order to more fully assess and define the residual effects upon the victim (Finkelhor, 1986; Walker, 1988). These should then be correlated to the existing standardized instruments for a more comprehensive understanding of the trauma and of the personality involved in treatment.
CHAPTER II

METHOD

Purpose

It was the primary purpose of this study to compare inpatient participants who were both sexually abused and self-mutilating with: (1) a control group, (2) a group of sexually abused patients who were not self-mutilating, and (3) a group of patients who were self-mutilating but not sexually abused. Comparisons were principally made on the demographic data, the MMPI/2 scales, and on the PARA scales, based upon the Post-traumatic Stress model.

Statement of the Problem

Sexual abuse involves some type of physical contact (that is perceived as sexual, abusive and intrusive), between a child and an individual in a position of power or control, from inappropriate touching to intercourse (Briere, 1989; Finkelhor, 1986). Sexual abuse is quite prevalent in society and often is traumatic for the victim, resulting in post-traumatic stress (Sgroi, 1988; Briere, 1989). As a result, sexual victims have common symptoms, similar to those experienced by victims of Posttraumatic Stress Disorder: anger, shame, betrayal, fear, sexuality issues, sexual dysfunction, repression of emotions, self-mutilation, mental confusion, dissociation, and depression. One characteristic behavior, self-mutilation (a key characteristic of Borderline Personality Disorder), is being utilized on an increasing basis by those who have experienced abuse.
and deep traumatic stress, and is a growing concern among the professionals who are working with the victims of sexual abuse (Favell, et.al, 1982). It was the intent of this differences in degree and patterns of pathology as well as the history (history of abuse, duration, frequency, relationship to offender, family history, number of offenders, history of physical abuse, et cetera), symptomatology, and current level of functioning of those patients (with a history of sexual abuse) who self-mutilate in contrast to those who do not. It was also the intent of this research to utilize a standardized instrument (MMPI-2) and an instrument developed for the assessment of common sexual abuse symptoms (PARA) in order to provide additional diagnostic and treatment data regarding these individuals. The assumption at work throughout the preparation of the literature review and descriptive study is that characteristics resulting from sexual abuse can be measured. It is also assumed that self-assessment and self-reporting by participants involved is reliable.

Hypotheses

The following hypotheses were developed:

**Hypothesis #1.** Sexual abuse victims experience greater Post-Traumatic Stress Disorder, and show greater elevations on the selected MMPI-2 scales than the non-self-harming groups.

**Hypothesis #2.** The sexual abuse and self-mutilation group show more severe psychopathology related to trauma, social health, and general adjustment than women and men of the other comparison groups.
Hypothesis #3. There is a significant correlational relationship between the PARA and the MMPI-2 scales associated with PTSD.

Hypothesis #4. The sexually abused/self-mutilating group show a higher mean on the PARA-A scale than the sexually abused/non-self-mutilating group.

Participants

Participants consisted of 156 inpatients at a psychiatric hospital in New York State, for the period of May 1, 1991, to May 31, 1992.

The sample consisted of four groups: SM (those who had a history of sexual abuse and a history of self-mutilation); Sm (those who had a history of sexual abuse without a known history of self-mutilation); sM (those who had no history of sexual abuse, but who had revealed a history of self-harm); and sm (those who had no history of either). Because of the difficulty in identifying those with histories of sexual abuse and/or self-mutilation, the selection process varied for each group.

Group #1 (SM)

The first inpatient group (SM), of participants with a history of sexual abuse and a history of self-harm, was composed of 57 female and 7 male adult patients who had completed either a valid (27) or invalid (6) MMPI-2 self-assessment, a PARA (as part of the Sexual Abuse Recovery Program-SARP), or were listed as a participant in the Recovery Program and/or on the SARP unit of the hospital. This group was selected by taking the existing list of SARP patients, and adding new subjects as they were admitted to the program. In addition, any patients with a history of sexual abuse (and a history of self-harm), identified while completing the other groups, were also included.
Group #2 (Sm)

The second group (Sm) of participants with a history of sexual abuse but with no history of self-harm, was composed of 38 female and 4 male adult patients who had completed either a valid (26) or invalid (2) MMPI-2 self-assessment, an earlier, but valid MMPI, a PARA (as part of the Sexual Abuse Recovery Program-SARP), or were listed as a participant in the Recovery Program and/or on the SARP unit of the hospital. This group was selected by taking the existing list of SARP patients, and adding new subjects as they were admitted to the program. In addition, any patients with a history of sexual abuse (but no history of self-harm), identified while completing the other groups, were also included.

Group #3 (sM)

The third group (sM) of participants, with a history of self-harm but with no history of sexual abuse, was composed of 17 female and 8 male adult patients who had completed either a valid (23) or invalid (2) MMPI-2 self-assessment. This group was selected by taking the existing list of MMPI-2 protocols administered during the same thirteen month period, and searching through the chart histories (including psychiatric interview, psychosocial history, other assessment forms, and chart process notes) for a history of self-harm. Because of the low percentage (approximately 5%) of those indicating self-harm, all forms of self-harm, including self-mutilation, intentionally wrecking an auto, overdosing on medication, hanging, et cetera, were included.

Group #4 (sm)

A randomized block design (sex, unit of hospital), was used, rather than a total randomized sample, to select the control group, as a random sample would have resulted in a increased loading of male alcoholics rather than female psychiatric patients which
predominate the sexual abuse program. The group was composed of 20 female and 5 male adult patients who were selected at random from a list of patients completing a valid MMPI-2, and then placed in the appropriate block (unit and sex) of subjects. The female to male ratio for this group was approximately equivalent to the ratio of female to male patients (five to one) admitted to the Sexual Abuse Recovery Program during the same period of time. In addition, the ratio of patients per unit was approximately equivalent to the number of beds available on that unit.

Procedures

Data Collection

This investigation was conducted by reviewing existing inpatient records (demographics from psychiatric histories, psychosocial histories, and chart notes; the MMPI-2; and the PARA). Subjects were coded by group, with the exception of the initial data collection, so there would be no identifying connection to the research data when completed.

Demographics

Demographics included: date of admission, age, sex, marital status, race, education, history of alcohol or mental illness in the family, previous treatment, diagnosis, and medications. In addition, history of emotional and/or physical abuse, relationship of offender, and number of offenders was included. If the patient had a history of alcohol abuse or an eating disorder, this was also included. The patient's history regarding occurrence of sexual abuse, initial age of abuse, relationship of offender(s), duration of abuse, frequency of abuse, and number of sexual offenders were recorded. Finally, the patient's history regarding self-harm was recorded (whether or not patient is self-mutilating, and method of self-mutilation/self-harm).
Test Scores

The MMPI-2 was mandatorily administered (until May 31, 1992), within two weeks from admission. During the thirteen-month period of time used in the research (May 1, 1991 to May 31, 1992), the revised format was administered to 887 adult inpatients (44% of adults admitted during that time.). If the patient had completed the test (275 females; 418 males), the report was on record in the patient file.

Recorded MMPI-2 scores included in "The Minnesota Report: Adult Clinical System Interpretive Report" were obtained for each patient who completed a valid profile. In addition, scores from 10 invalid profiles were obtained and included (SM:6; Sm:2; sM:2). Data collected from the MMPI-2 included scores for the Validity Scales, the Basic Scales, the Content Scales, the Supplementary Scales, PTSD-Keane, PTSD-Schlenger, TRIN, VRIN; Harris-Lingoes'; Ben-Porath, Hostetler, Butcher, and Graham's (1989) Social Introversion Subscales;, and the Critical Items (Koss-Butcher, Lachar-Wrobel). The invalid reports did not include all of the above information; however, when given, this was included in the data collected.

In addition, the files of the inpatients who had participated in the Sexual Abuse Recovery Program (SARP) were reviewed for the data given on the PARA self-assessment tool, and for additional demographic data as applicable (sexual abuse and/or self-mutilation history, methods of self-mutilation). Although the PARA includes a section (B) relating specifically to the issue of self-mutilation, the incidents of inpatient self-mutilation were validated by staff on the unit as well.

Statistical Procedures

Statistical analyses for group differences were performed on the demographical data gathered from the four groups using the Kwikstat Analysis of Variance and Chi Square
modules (Kwikstat, 1991) for demographic variables, and the significant differences related to PTSD (Table 17). The correlational analysis of the relationship between demographic variables and the PARA (N = 61) and MMPI-2 Scales (N = 113) used the SPSS-X Pearson's Correlation procedure (SPSS-X User's Guide, 1988) to determine significant relationships. The level of statistical significance was placed at .05 alpha level, therefore any results found to be at p = .05 or less was found to be significant.

Statistical analyses for group differences were performed on the MMPI-2 Scales and subscales using the SPSS-X Analysis of Variance, T-test, and Chi Square procedures (SPSS-X User's Guide, 1988), and the Duncan \textit{a posteriori} contrast test for analysis of pairs of means. The level of statistical significance was placed at .05 alpha level, therefore any results found to be at p = .05 or less were found to be significant.

Statistical analyses for group differences were performed on the PARA and NEWPARA Scales using the SPSS-X Analysis of Variance and T-test procedures (SPSS-X User's Guide, 1988), and the Duncan post-hoc procedure for analysis of variance between the inpatient groups. The SPSS-X Pearson Correlation procedure was used to determine significant correlational relationships between the PARA results, individual items, and the MMPI-2 Validity, Clinical, and PTSD (PK, PS) Scales. The level of statistical significance was placed at .05 alpha level, therefore any results found to be at p = .05 or less was found to be significant.

\textbf{Definition of Terms}

One of the common problems associated with research on sexual abuse, is the definition of abuse and what constitutes an abusive act. This has varied among researchers (Briere & Zaidi, 1989; Finkelhor, 1986; Tong, et al., 1987). Nearly all researchers include incest, in which a parent has sexual contact with a minor child (Blume, 1990). This type of abuse is more often accessible to researchers and has
common characteristics that make it easier to analyze. But limiting research to this category alone, ignores other serious types of abuse about which little is known. Others view sexual abuse as a sexual approach involving some physical contact between a female child and an older family member in a "too-close" position of power or control, something that the child individual experienced as sexual, from inappropriate touching to intercourse (Donaldson, 1983; Peters, 1986; VanderMey & Neff, 1982). This last definition more closely resembles the definition sexual abuse victims themselves give and is supported by other research as well (Peters, 1986). Others have included abuse by non-caretakers and nonfamily, i.e., abuse by older children, and abuse by peers (Tong, et al., 1987). However, because such experiences are less likely to come to the attention of child protective services, they tend to be underrepresented in samples. They do, however, show up more frequently in criminal justice referrals than from child welfare system referrals, and as less is known about them and their impact, it has been recommended that they be included in research (Finkelhor, 1986).

The definition of an abusive act is another concern in the research of sexual abuse. Researchers basically agree that abuse includes intercourse and attempted intercourse (anal or vaginal) and oral or manual contact with the genitals of either the child or the offender (Briere, 1989; Finkelhor, 1986). Additional researchers have included contact with buttocks, breasts, thighs, sexual kissing, inappropriate sexual relationships with peers, and experiences with exhibitionists (Briere, 1989). Some researchers include both contact and noncontact abuse in their definition but report separate prevalence rates for both categories (Tong, et al, 1987). Others combine the two and report global findings (Finkelhor, 1984). Research also varies in the ceiling age of abuse (Finkelhor, 1984). Finkelhor (1986) expresses two factors that need to be considered: 1) if researchers are too restrictive, they may not be able to test their assumptions about abuse; 2) if researchers are too liberal, their research may be too broad and meaningless. To protect
against objections to liberality, the researcher should present analyses based upon several definitions or delineate the various types within the research sample.

In the current research, in order to insure clarity, the following definition of sexual abuse was used: a sexual approach involving some physical contact between a child or adult and another individual in a position of power or control, something that the child or less powerful individual perceives or experiences as sexual, ranging from inappropriate touching to intercourse, and perceived as abusive or intrusive by the less powerful individual.

Instruments

Demographic Questionnaire

A brief demographic page was included in the PARA when administered (as part of the SARP program) to the inpatients participants (a sample appears in Appendix B). Information requested included information about the following variables: (a) gender; (b) age; (c) marital status; (d) race; (e) education; (f) diagnosis; (g) previous treatment; (h) medication; (i) history of sexual abuse; (j) history of physical abuse; (k) history of self-harm.

Minnesota Multiphasic Inventory (MMPI/MMPI-2)

The MMPI is a standardized and well-researched personality assessment instrument which has been used extensively in both inpatient and outpatient assessment. It was designed to assess a number of the major patterns of personality and emotional disorders (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989).

The MMPI-2, recently revised (1989), with contemporaneous normative data including scores across the United States, now includes uniform T-scores, rather than the linear T-scores used in the original MMPI. Because of the percentile variance of individual
scores on the original MMPI, the difference often led to problems in interpretation. This has now been alleviated to some degree with the eight basic clinical scales (excluding scales 5 and 0) and the Content Scales utilizing the uniform T-score which assures that a T-score of a given level (e.g., 70) has the same percentile equivalent for all scales (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989; Graham, 1990).

Linear T-scores of 65 (92nd percentile) and above, treated as clinically significant and comparable to the previous score of 70, were utilized for Scales 5 and 0, the Supplementary Scales, and the Validity Scales as the distributions of these scales differ considerably from the other eight clinical scales.

Reliability

The short-term reliability of the MMPI-2 scales appear to be as high or higher than that of the original MMPI (Graham, 1990). Test-retest reliability (one week interval) on the basic scales range from .67 to .92 for a sample of 82 men, and from .58 to .91 for a sample of 111 women (Butcher, et al., 1989). Test-retest reliability for the supplementary scales ranges from .62 to .92 for the men, and from .69 to .91 for the women, while, on the content scales, test-retest reliability ranges from .78 to .91 for the men and from .79 to .91 for the women.

Comparison of the MMPI and MMPI-2 Clinical Scales

The clinical scales of the revised form, the MMPI-2, basically contain the same content as the original MMPI, with a few minor changes due to possible sexist wording, modernization of idioms and usage, grammatical clarification, and simplification. Graham (1990) advises that most of the research completed on the MMPI, regarding interpretation of the scales, still applies to the MMPI-2. However, as previously noted, the original MMPI used a cutoff level of 70 (95th percentile) for high scores, whereas the
new manual interpretations use the cutoff level of 65 (92nd percentile) to indicate high scores. In addition, the MMPI-2 manual defines a low score as a T-score of 40 or below, unless otherwise indicated (Butcher, et al., 1989).

**High Codes**

Clients without any clinical scale elevated over a T score of 65 (70 on the MMPI) are quite common in psychiatric settings (Greene, 1991). However, the most frequent profile (two-point) code types in psychiatric settings are: 24/42; 26/62; 27/72; 28/82; 46/64; 48/84; and 68/86 (Butcher, et al, 1989).

**Content Scales**

Content interpretation as an adjunct to traditional clinical scale interpretation has become widely accepted and has often been shown to be as valid at describing and predicting personality variables (Butcher, et al., 1989). There are three main approaches to content interpretation: the MMPI subscales, the content scales, and the "critical items". There have been a few changes in the content, while the critical-item approach and the use of the subscales have not been substantially altered (Butcher, et al., 1989).

For the purposes of the current research, the content scales developed by Butcher, Graham, Williams, and Ben-Porath (1989) were used, as they were included in the patient's recorded report (The Minnesota Report: Adult Clinical System Interpretive Report (1991). The same uniform T-score transformations used for the validity and clinical scales of the MMPI-2 were used for the content scales, thus allowing comparability within the set of content scales and clinical scales (Graham, 1990). The content scales are quite stable over time, and in fact, appear to be more reliable than the basic clinical scales (Graham, 1990).
Supplementary Scales

A number of additional scales are presented to assist in the interpretation of the basic scales and to augment the coverage of clinical problems and disorders (Butcher, et al., 1989). In interpreting the scales, there are no absolute cutoff high and low scores. However, in general, according to the manual (Butcher, et al., 1989), T scores greater than 65 should be considered as high scores and T scores below 40 should be considered as low scores. In addition, for some scales, more specific recommendations are made.

The traditional supplementary scales are: Welsh Anxiety (A) and Repression (R) scales, the Ego Strength (Es) scale, and the MacAndrews Alcoholism (MAC-R) scale (Butcher, et al., p. 40-42).

Post Traumatic Stress Disorder Scales (PK and PS)

**PK.** The PK scale was developed by Keane and others (1982, 1987), by contrasting the MMPI item responses of 60 male Vietnam combat veterans who had diagnoses of post-traumatic stress disorder (PTSD), and 60 male veterans who had diagnoses other than PTSD (Graham, 1990). The content of items on the scale indicates anxiety, worry, sleep disturbance, presence of unwanted and disturbing thoughts, lack of emotional control, feeling misunderstood and mistreated, and great emotional turmoil.

**PS.** The 60 items listed for the PS scale do not really represent a formal scale (Graham, 1990), but includes items that Schlenger and his associates at the Research Triangle Institute in North Carolina found to differentiate among Vietnam veterans who had been diagnosed as PTSD, and Vietnam veterans without other psychiatric involvement. Forty-five of the items are also included in the PK scale, described above. The additional 15 items are ones from the experimental form of the MMPI (AX) that were endorsed differentially by the three groups of veterans. In addition, the PS scale has an almost identical pattern of item overlap as that of the PK scale: 11 items shared
with scale 2, 10 items shared with scale 3, 9 items shared with scale 4, 17 items with
scale 7, and 27 items with scale 8 (45%) (Greene, 1991).

The PK and PS scales are "saturated" with first-factor variance as measures of
general maladjustment and emotional distress rather than Post Traumatic Stress Disorder
(Greene, 1991). Butcher and others suggest the need for additional measures to identify
various subgroups suffering from PTSD (Butcher, et al., 1989). Greene (1991) advises
clinicians to be cautious about diagnosing any client as having Post Traumatic Stress
Disorder based upon their scores on these scales because of the significant first-factor
variance involved.

High scores on the PK and PS Scales indicate individuals who are in intense
emotional distress, feel anxious, guilty and depressed, and fear loss of emotional and
cognitive control. They feel misunderstood and mistreated. They may be experiencing
sleep disturbance, and may be having unwanted and disturbing thoughts (Graham,
1990).

Low scorers are less likely to be associated with post-traumatic stress disorder, and
indicate persons who are not reporting emotional distress, anxiety, depression, and sleep
disturbance. They do not report unwanted and disturbing thoughts, do not feel
misunderstood and mistreated, and do not fear loss of emotional and cognitive control
(Graham, 1990).

**Harris-Lingoes Subscales**

Harris and Lingoes, in 1955, constructed subscales for scales 2, 3, 4, 6, 8, and 9, to
provide additional information about the patterns of items endorsed in the scored
direction when obtaining a particular score on a clinical scale (Butcher, et al., 1989).
This information is helpful in understanding why a subject received an elevated score,
and can be helpful in interpreting marginally elevated scores (T scores between 65 and 75).

**Personal Assessment of Responses to Abuse (PARA)**

The PARA, developed by this author, is a self-assessment of common behaviors, responses and feelings involved in abuse (anger, loneliness, betrayal, sense of or loss of control, sexual dysfunction or difficulties, anxiety, fear, shame, blame, loss of trust, guilt, and others) (Rader, 1989). The assessment was constructed to evaluate the existence and degree of characteristic responses during the evaluation process and to provide therapeutic indicators for further development of treatment.

**Development**

The development of the PARA began with a number of items listed on an oppositional basis, where two opposing statements were given with feelings or behaviors that were rated at opposing degrees (1-10). This was then administered to individuals participating in group therapy for victims of sexual abuse. Participants explained that this was confusing and difficult to evaluate overall; therefore, the present format was developed, with improved response.

The corrected assessment (and adapted formats for other members of the incestuous family) was then presented to participants currently involved in a sexual abuse treatment program (Lakeland Mental Health Center, Fergus Falls, MN). Forms of the assessment (victims) were also administered to 91 community college students (predominately white middle class adults, ages seventeen to mature adults) in northern Minnesota (See Table 3).
Reliability

The college group showed an alpha of .9149 (on 41 items) with a standardized alpha of .917 (N=91). The mean was 141.901 with a variance of 1149.401 and a standard deviation of 33.903. The mean for the treatment group was 160.781 (N=43). The item mean for the college group was 3.012 with a range of 3.815 and a variance of 1.0384. The inter-item correlation mean was .212 with a range of 1.4723 and a variance of .088. Several items (#3,6,9,15,21,28,31,39,40) were positively keyed to diminish the possibility of a response set. The items had a correlation of -.50 to -.03 to the other items in the instrument. No item was highly correlated to another and alpha remained high (.9082-.927) after removal of any one item.

Validity

Through face validity evaluation, the items appear to measure frequency of typical responses of abuse experience. This had been confirmed by the judges (therapists experienced in working with sexual abuse, and sexual abuse treatment participants). In addition, because the instrument was designed to measure response frequency by those who had been involved in abusive situations, the validity was supported by increased response means in the treatment groups (compared to the college "norm" group). The scores of the treatment groups were consistent with the degree of treatment required, as expected.

Scoring Distribution

On the original form of the instrument, with 41 items and a range of 1-7 points per item, the score for an individual ranged from 41-287. On the college administration, the range was 87-218, with a mean of 141.9. On the therapy groups, the range of scores varied from 125 to 225. Group means were 167.00 (Adolescent Victims), 171.67 (Adult
### Table 3

**Means of Previous Treatment Administration of the PARA (Based upon original 41 Items)**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>College (Control)</td>
<td>91</td>
<td>141.901</td>
<td>33.903</td>
</tr>
<tr>
<td>Treatment Groups:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Victims</td>
<td>13</td>
<td>167.000</td>
<td>8.956</td>
</tr>
<tr>
<td>Adult Victims I</td>
<td>6</td>
<td>171.667</td>
<td>7.785</td>
</tr>
<tr>
<td>Adult Victims II</td>
<td>3</td>
<td>185.667</td>
<td>0.824</td>
</tr>
<tr>
<td>Mothers I</td>
<td>5</td>
<td>157.400</td>
<td>10.337</td>
</tr>
<tr>
<td>Mothers II</td>
<td>5</td>
<td>153.800</td>
<td>13.289</td>
</tr>
<tr>
<td>Offenders I</td>
<td>5</td>
<td>153.600</td>
<td>7.913</td>
</tr>
<tr>
<td>Offenders II</td>
<td>6</td>
<td>136.333</td>
<td>3.491</td>
</tr>
</tbody>
</table>

Victims I), 153.8 (Mothers II), 157.40 (Mothers I), 153.60 (Offenders I) and 136.33 (Offenders II) with an overall mean of 160.781 (a difference of 18.88). It should be noted that the treatment means would be close to one standard deviation from the college mean scores. High scores would indicate responses deviating from the norm and indicative of possible trauma and responses due to experience with abuse. Low scores could indicate the absence (denial) of responses or behavior of abuse or more healthy adjustment.
Scores could also be used as indicators of specific areas to concentrate upon in therapy and to note changes or improvements in specific responses.

**Scoring for the present study.** For scoring purposes, the "Does not apply" (1) was dropped and recomputed as missing data.
CHAPTER III.

RESULTS

The results will be presented in three sections, including demographics, MMPI-2 results, and the PARA results.

Demographics

As shown in Tables 4 and 5, no significant differences were found between groups regarding the majority of the demographic variables, including history of an eating disorder or alcohol abuse. There were significant differences found between groups on previous treatment, medication, history of physical abuse, number of physical offenders, and relationship of physical offender(s). (See Tables 5 and 6). However, small cell size makes the interpretation tenuous.

Significant correlations between family history, duration of abuse, number of physical offenders, and physical abuse with the MMPI-2 Scales F and 8, and the PARA, are shown in Table 7. The table also shows significant correlations between duration of sexual offense, Scales K and 6, and the PARA. The number of offenders was shown to be significantly correlated with PARA-A scores, as well. In addition, self-mutilation was shown to be significantly correlated with the PARA (A and B), and the MMPI-2 Scales F, 2, 6, 7, 8, 0, and PK. Finally, the frequency of an eating disorder was shown to be correlated significantly with the PARA and with the MMPI-2 Scales 4, 5, and 6.
### Table 4

**Demographical Data by Group**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>Sm</th>
<th>sM</th>
<th>sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>64</td>
<td>42</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>38</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age: (mean)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education: (mean)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Female</td>
<td>13.3</td>
<td>13.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status:</th>
<th>never m.</th>
<th>married</th>
<th>divorced</th>
<th>widowed</th>
<th>separ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>30 (47%)</td>
<td>25 (39%)</td>
<td>7 (11%)</td>
<td>1 (2%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Female</td>
<td>14 (33%)</td>
<td>16 (38%)</td>
<td>6 (14%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race: (%)</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>6 (86%)</td>
<td>0</td>
<td>1 (14%)</td>
<td>0</td>
</tr>
<tr>
<td>Black</td>
<td>52 (91%)</td>
<td>1</td>
<td>1 (13%)</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>33 (87%)</td>
<td>5</td>
<td>0</td>
<td>1 (6%)</td>
</tr>
</tbody>
</table>

Note: a indicates 100 percent.
Table 5

**Abuse and Treatment Data by Group**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>Sm</th>
<th>sM</th>
<th>sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>64</td>
<td>42</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Family History:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>24</td>
<td>12</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Alc. ab.</td>
<td>21</td>
<td>16</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Ment. II.</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Both</td>
<td>15</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Previous Treatment:**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prev. Inpt.</td>
<td>30</td>
<td>17</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Outpt.</td>
<td>24</td>
<td>21</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>None</td>
<td>10</td>
<td>4</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Mean Tx.</td>
<td>2.2</td>
<td>1.7</td>
<td>2.1</td>
<td>1.08</td>
</tr>
<tr>
<td>Medication:**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prozac</td>
<td>19</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Other Med.</td>
<td>33</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>None</td>
<td>12</td>
<td>19</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Alcohol Abuse:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>23</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Eating Disorder:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>18</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Only significant differences noted. Kwikstat (1991), Chi Square Module, used.

\[ \chi^2 = 16.21 \quad DF = 6 \quad p = 0.014 \]

\[ \chi^2 = 16.65 \quad DF = 6 \quad p = 0.012 \]
Table 6

**History of Physical Abuse by Group**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>Sm</th>
<th>sM</th>
<th>sm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History of Abuse:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Abuse:</td>
<td>40 (63%)</td>
<td>20 (48%)</td>
<td>9 (36%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>None/Emotional Only:</td>
<td>24 (37%)</td>
<td>22 (52%)</td>
<td>16 (64%)</td>
<td>22 (88%)</td>
</tr>
<tr>
<td><strong>No. of Physical Offenders:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Mean</td>
<td>1.172</td>
<td>0.786</td>
<td>0.640</td>
<td>0.120</td>
</tr>
<tr>
<td>Total SD</td>
<td>1.149</td>
<td>0.812</td>
<td>0.810</td>
<td>0.332</td>
</tr>
<tr>
<td><strong>Relationship of Physical Offender:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father:</td>
<td>17 (27%)</td>
<td>8 (19%)</td>
<td>5 (20%)</td>
<td>0</td>
</tr>
<tr>
<td>Other:</td>
<td>23 (36%)</td>
<td>12 (29%)</td>
<td>4 (16%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>None:</td>
<td>24 (38%)</td>
<td>22 (52%)</td>
<td>16 (64%)</td>
<td>22 (88%)</td>
</tr>
</tbody>
</table>

Note: Kwikstat (1991), Analysis of Variance and Chi Square Modules used.

\( ^a(\chi^2 = 19.69 \quad DF = 3 \quad p = 0.000) \)

\( ^b(F = 8.29 \quad p = 0.000) \)

\( ^c(\chi^2 = 20.84 \quad DF = 6 \quad p = 0.002) \)

**History of Sexual Abuse**

There were no differences between the sexually abused groups for the sexual abuse variables: age abused, number of offenders, relationships of offenders, duration of abuse, or frequency of abuse (See Table 8).

**History of Self-Harm**

There were no differences between previous treatment, eating disorder, alcohol use, duration of abuse, frequency of abuse, family history, or history of sexual abuse, with the methods or number of methods of abuse (not shown in a table).
Table 7

Pearson Product Moment Correlation Coefficients Between Demographic Variables and the PARA and MMPI-2 Scales (Women Only in Total Sample)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Fam.H.</th>
<th>AgeVic</th>
<th>DurOff</th>
<th>NumOff</th>
<th>FreqOff</th>
<th>PhyAbus</th>
<th>NumOff</th>
<th>Alcoh</th>
<th>EatDis</th>
<th>Self-Mut</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWPARA-A</td>
<td>0.145</td>
<td>-0.289</td>
<td>0.506**</td>
<td>0.233</td>
<td>0.072</td>
<td>0.169</td>
<td>-0.233</td>
<td>0.044</td>
<td>0.542**</td>
<td>0.459**</td>
</tr>
<tr>
<td>NEWPARA-B</td>
<td>0.092</td>
<td>-0.079</td>
<td>0.441**</td>
<td>0.134</td>
<td>-0.069</td>
<td>0.244</td>
<td>0.024</td>
<td>0.078</td>
<td>0.335**</td>
<td>0.516**</td>
</tr>
<tr>
<td>PARA -A</td>
<td>0.036</td>
<td>-0.038</td>
<td>0.294*</td>
<td>0.249*</td>
<td>-0.073</td>
<td>0.175</td>
<td>-0.032</td>
<td>0.145</td>
<td>0.389**</td>
<td>0.434**</td>
</tr>
<tr>
<td>PARA-B</td>
<td>0.155</td>
<td>-0.072</td>
<td>0.451**</td>
<td>0.171</td>
<td>-0.072</td>
<td>0.226*</td>
<td>0.004</td>
<td>0.096</td>
<td>0.356**</td>
<td>0.446**</td>
</tr>
<tr>
<td>L</td>
<td>-0.032</td>
<td>0.003</td>
<td>0.451</td>
<td>0.002</td>
<td>0.128</td>
<td>-0.099</td>
<td>-0.073</td>
<td>-0.132</td>
<td>0.018</td>
<td>-0.139</td>
</tr>
<tr>
<td>F</td>
<td>0.199*</td>
<td>0.083</td>
<td>0.344**</td>
<td>0.158</td>
<td>0.177</td>
<td>0.232*</td>
<td>0.206*</td>
<td>0.005</td>
<td>0.144</td>
<td>0.372**</td>
</tr>
<tr>
<td>K</td>
<td>-0.036</td>
<td>-0.167</td>
<td>0.344</td>
<td>0.059</td>
<td>-0.077</td>
<td>-0.052</td>
<td>-0.087</td>
<td>0.018</td>
<td>-0.006</td>
<td>-0.133</td>
</tr>
<tr>
<td>PK</td>
<td>0.096</td>
<td>-0.031</td>
<td>-0.137</td>
<td>-0.054</td>
<td>-0.088</td>
<td>0.077</td>
<td>0.049</td>
<td>0.006</td>
<td>0.028</td>
<td>0.261**</td>
</tr>
<tr>
<td>PK</td>
<td>0.049</td>
<td>0.014</td>
<td>0.179</td>
<td>0.014</td>
<td>0.179</td>
<td>0.012</td>
<td>-0.048</td>
<td>-0.052</td>
<td>0.186</td>
<td>0.122</td>
</tr>
<tr>
<td>PK</td>
<td>-0.032</td>
<td>0.020</td>
<td>0.113</td>
<td>-0.014</td>
<td>0.110</td>
<td>0.039</td>
<td>0.030</td>
<td>-0.100</td>
<td>0.121</td>
<td>0.001</td>
</tr>
<tr>
<td>PK</td>
<td>0.128</td>
<td>0.043</td>
<td>0.172</td>
<td>0.125</td>
<td>0.17</td>
<td>0.216</td>
<td>0.194*</td>
<td>-0.145</td>
<td>0.231*</td>
<td>0.111</td>
</tr>
<tr>
<td>PK</td>
<td>0.172</td>
<td>0.031</td>
<td>0.137</td>
<td>0.016</td>
<td>-0.028</td>
<td>0.012</td>
<td>0.004</td>
<td>0.083</td>
<td>-0.290**</td>
<td>0.075</td>
</tr>
<tr>
<td>PK</td>
<td>0.035</td>
<td>0.050</td>
<td>0.228*</td>
<td>0.117</td>
<td>0.065</td>
<td>0.171</td>
<td>0.155</td>
<td>0.177</td>
<td>0.200*</td>
<td>0.105</td>
</tr>
<tr>
<td>PK</td>
<td>-0.023</td>
<td>0.034</td>
<td>0.228</td>
<td>0.012</td>
<td>0.109</td>
<td>0.106</td>
<td>0.001</td>
<td>-0.068</td>
<td>0.155</td>
<td>0.206*</td>
</tr>
<tr>
<td>PK</td>
<td>0.068</td>
<td>0.012</td>
<td>0.044</td>
<td>0.024</td>
<td>0.077</td>
<td>0.247*</td>
<td>0.170</td>
<td>-0.124</td>
<td>0.140</td>
<td>0.301**</td>
</tr>
<tr>
<td>PK</td>
<td>0.020</td>
<td>0.128</td>
<td>0.244</td>
<td>-0.019</td>
<td>-0.063</td>
<td>0.169</td>
<td>0.223*</td>
<td>-0.035</td>
<td>-0.159</td>
<td>-0.227</td>
</tr>
<tr>
<td>PK</td>
<td>0.046</td>
<td>0.036</td>
<td>-0.042</td>
<td>0.017</td>
<td>0.155</td>
<td>0.036</td>
<td>-0.103</td>
<td>-0.038</td>
<td>0.110</td>
<td>0.274**</td>
</tr>
<tr>
<td>PK</td>
<td>-0.077</td>
<td>0.062</td>
<td>0.186</td>
<td>0.060</td>
<td>0.121</td>
<td>0.127</td>
<td>0.027</td>
<td>-0.052</td>
<td>-0.011</td>
<td>0.238*</td>
</tr>
<tr>
<td>PK</td>
<td>-0.094</td>
<td>0.064</td>
<td>0.173</td>
<td>0.060</td>
<td>0.136</td>
<td>0.148</td>
<td>0.040</td>
<td>-0.044</td>
<td>0.031</td>
<td>0.188</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
No differences were found between groups (SM, sM) in the number of methods used (See Table 9), or on the majority of the methods utilized. However, the inpatients who had completed an invalid MMPI-2 report had a greater number of methods used than those who had not completed a test or those who had completed an invalid test. In addition, the sM group more frequently abused pills and used guns than the SM group (see Table 9). Also, the self-harming/sexually abused subjects showed higher MMPI-2 and PARA scores than the subjects not using any method of self-harm (see Table 10).

**MMPI-2 Results**

The second part of the results will involve the findings relating to the degree of psychopathology and trauma (PTSD) found within the groups, especially within the sexually abused/self-harming group (SM), as demonstrated by the MMPI-2. The results in relationship to the MMPI-2 focus on the following hypotheses.

**Hypothesis #1**

Sexual abuse victims experience greater Post-Traumatic Stress Disorder, and will show greater elevations than the non-self-harming groups on the selected MMPI-2 scales.

For this hypothesis, the MMPI-2 Scales F, 2, 4, 6, 7, 8, 0, PK, and PS, will be examined as representative of the PTSD syndrome.

The females in both sexually-abused groups revealed significantly greater elevations than the control group (sm) on Scales F and 4. In addition, the females in the SM group showed significantly greater elevations than the sm group on Scales 6, 8, and 0, while the males in the SM group showed greater elevations than the sM (self-harming, with no history of sexual abuse) on Scales F, 6, 7, and 8 (See Tables 11 & 12). No significant differences were found on the PTSD scales, PK and PS (SM Table 13).
Table 8

**History of Sexual Abuse by Group**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>64</td>
<td>42</td>
</tr>
</tbody>
</table>

**First Age Offended:**

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.8</td>
<td>7.3</td>
</tr>
<tr>
<td>0-5</td>
<td>29 (45%)</td>
<td>14 (33%)</td>
</tr>
<tr>
<td>6-10</td>
<td>12 (19%)</td>
<td>8 (15%)</td>
</tr>
<tr>
<td>11+</td>
<td>10 (16%)</td>
<td>5 (12%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>13 (20%)</td>
<td>15 (36%)</td>
</tr>
</tbody>
</table>

**# Offenders:**

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>1 Off.</td>
<td>33 (52%)</td>
<td>28 (68%)</td>
</tr>
<tr>
<td>2 Off.</td>
<td>13 (20%)</td>
<td>6 (14%)</td>
</tr>
<tr>
<td>&gt;2 Off.</td>
<td>18 (28%)</td>
<td>8 (18%)</td>
</tr>
</tbody>
</table>

**Relationship of Offenders:**

<table>
<thead>
<tr>
<th></th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>27 (42%)</td>
<td>8 (19%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>1 (1.6%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>Stepfather:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>2 (3%)</td>
<td></td>
</tr>
<tr>
<td>Other Off.</td>
<td>2 (3%)</td>
<td></td>
</tr>
<tr>
<td>Brother:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>7 (11%)</td>
<td>3 (7.2%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>3 (4.7%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>Uncle:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>5 (8%)</td>
<td>4 (9.6%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>4 (6%)</td>
<td></td>
</tr>
<tr>
<td>Grandfather:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>3 (5%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>4 (6%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>Neighbor/Friend:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>9 (14%)</td>
<td>5 (12%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>3 (5%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 Continued

History of Sexual Abuse by Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Off.</td>
<td>6 (9%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>6 (9%)</td>
<td>6 (14%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>6 (9%)</td>
<td>3 (7%)</td>
</tr>
<tr>
<td><strong>Unknown:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Off.</td>
<td>5 (8%)</td>
<td>15 (36%)</td>
</tr>
<tr>
<td>Other Off.</td>
<td>1 (1.6%)</td>
<td>6 (14%)</td>
</tr>
<tr>
<td><strong>Duration of Abuse:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>7.36 yrs.</td>
<td>5.69 yrs.</td>
</tr>
<tr>
<td><strong>Frequency Abused:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.8x</td>
<td>1.8x</td>
</tr>
<tr>
<td>1 x</td>
<td>10 (16%)</td>
<td>10 (24%)</td>
</tr>
<tr>
<td>2 or more</td>
<td>52 (81%)</td>
<td>27 (64%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (3.4%)</td>
<td>5 (12%)</td>
</tr>
</tbody>
</table>

Note: "Other" indicates offenders other than the first offender and after the first offense of abuse.

As significant differences were found for the sexually abused groups on Scales F, 4 (females only), 6 (SM), 7 (SM), 8 (SM), and 0 (SM), but not on the PK and PS scales, this hypothesis was supported on six of the nine scales.

**Hypothesis #2**

The sexual abuse and self-mutilation group show more severe psychopathology related to trauma, social health, and general adjustment than women or men of the other control groups.
Table 9

History of Self-Mutilation by Group (Females & Males)

<table>
<thead>
<tr>
<th>Variable</th>
<th>SM</th>
<th>sM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>M</td>
</tr>
</tbody>
</table>

N:
Females/Males (57/7) (17/8)

Number of Methods: 1.42 1.80

Method Used:

- Cut/Scratch: .625 .360
- Abuse Pills: .297 .560
- Hanging: .031 .040
- Auto: .016 .320
- Suicide/Oth: .203 .080
- Hit Hd/Hnd: .156 .040
- Break Bones: .016 .000
- Guns: .016 .160
- Other: .094 .240

This hypothesis will be tested by the number of invalid profiles, the elevations on the MMPI-2 validity and clinical scales, and elevations on the PTSD-related scales: anxiety (A), depression (DEP, D1), anger (ANG), cynicism (CYN), addiction admission (AAS), treatment outcome (TRT), marital distress (MDS), family (FAM), and work (WRK), social (SOD, ASP, Si1, Si2, Si3, Hy1, Pd1, Pd2, Pd4, Pd5, and Sc1), and health concerns (HEA, D2, D3, Hy3, Hy4) scales, and self-esteem (LSE) and social responsibility (Re).
### Differences Between Self-Harming and Non-Self-Harming Patients on the MMPI-2 Scales

<table>
<thead>
<tr>
<th>Used Method</th>
<th>Did Not Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cutti ng (N = 113)</th>
<th>Abuse Pills (N = 114)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>76.6 10.1</td>
</tr>
<tr>
<td></td>
<td>67.5 15.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>Value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.1</td>
<td>16.8</td>
<td>62.3</td>
<td>12.4</td>
<td>2.05</td>
<td>.0460</td>
</tr>
<tr>
<td>75.5</td>
<td>18.7</td>
<td>64.4</td>
<td>12.6</td>
<td>3.04</td>
<td>.0040</td>
</tr>
<tr>
<td>76.6</td>
<td>10.1</td>
<td>67.5</td>
<td>15.3</td>
<td>3.41</td>
<td>.0010</td>
</tr>
</tbody>
</table>

Note: Kwikstat's (1991) t-test module used.

**MMPI-2 Status (Invalid or Refused)**

There was a significant difference between groups with the self-harm groups (SM,sM) indicating a greater degree of invalid or refused tests.
### Table 11

Analysis of Variance Results for the Women Samples on the Validity and Clinical Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>SM(N=30) M</th>
<th>SD</th>
<th>Sm(N=27) M</th>
<th>SD</th>
<th>sM(N=17) M</th>
<th>SD</th>
<th>sm(N=20) M</th>
<th>SD</th>
<th>F Ratio</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>48.333</td>
<td>9.271</td>
<td>50.296</td>
<td>8.887</td>
<td>48.767</td>
<td>7.058</td>
<td>50.750</td>
<td>8.378</td>
<td>0.442</td>
<td>0.724</td>
</tr>
<tr>
<td>F</td>
<td>75.000</td>
<td>15.179</td>
<td>66.824</td>
<td>17.840</td>
<td>67.824</td>
<td>17.840</td>
<td>56.600</td>
<td>10.287</td>
<td>6.802</td>
<td>0.000</td>
</tr>
<tr>
<td>K</td>
<td>43.533</td>
<td>8.460</td>
<td>44.111</td>
<td>7.718</td>
<td>44.706</td>
<td>12.653</td>
<td>50.250</td>
<td>10.407</td>
<td>2.284</td>
<td>0.084</td>
</tr>
<tr>
<td>?</td>
<td>0.933</td>
<td>2.016</td>
<td>1.630</td>
<td>5.182</td>
<td>4.235</td>
<td>7.496</td>
<td>0.750</td>
<td>1.943</td>
<td>2.436</td>
<td>0.070</td>
</tr>
<tr>
<td>1(Hs)</td>
<td>64.200</td>
<td>12.976</td>
<td>58.370</td>
<td>13.218</td>
<td>59.529</td>
<td>15.055</td>
<td>57.050</td>
<td>13.061</td>
<td>1.430</td>
<td>0.239</td>
</tr>
<tr>
<td>2(D)</td>
<td>71.933</td>
<td>13.704</td>
<td>66.926</td>
<td>14.175</td>
<td>70.941</td>
<td>15.147</td>
<td>64.250</td>
<td>15.358</td>
<td>1.403</td>
<td>0.247</td>
</tr>
<tr>
<td>3(Hy)</td>
<td>64.567</td>
<td>14.376</td>
<td>61.333</td>
<td>14.949</td>
<td>60.706</td>
<td>15.107</td>
<td>61.900</td>
<td>13.738</td>
<td>0.349</td>
<td>0.790</td>
</tr>
<tr>
<td>5(Mf)</td>
<td>50.567</td>
<td>9.453</td>
<td>47.741</td>
<td>10.302</td>
<td>47.824</td>
<td>11.323</td>
<td>48.000</td>
<td>8.663</td>
<td>0.513</td>
<td>0.674</td>
</tr>
<tr>
<td>6(Pa)</td>
<td>68.233</td>
<td>14.088</td>
<td>62.851</td>
<td>11.159</td>
<td>62.177</td>
<td>12.754</td>
<td>59.100</td>
<td>12.161</td>
<td>2.288</td>
<td>0.084</td>
</tr>
<tr>
<td>7(Pt)</td>
<td>68.867</td>
<td>14.488</td>
<td>62.444</td>
<td>12.008</td>
<td>69.588</td>
<td>16.612</td>
<td>61.500</td>
<td>15.098</td>
<td>1.967</td>
<td>0.125</td>
</tr>
<tr>
<td>8(Sc)</td>
<td>70.967</td>
<td>14.954</td>
<td>65.185</td>
<td>10.969</td>
<td>69.000</td>
<td>14.093</td>
<td>58.750</td>
<td>10.472</td>
<td>3.935</td>
<td>0.011</td>
</tr>
<tr>
<td>9(Ma)</td>
<td>54.333</td>
<td>10.759</td>
<td>56.370</td>
<td>12.695</td>
<td>55.824</td>
<td>10.513</td>
<td>54.050</td>
<td>11.980</td>
<td>0.229</td>
<td>0.876</td>
</tr>
<tr>
<td>O(Si)</td>
<td>61.767</td>
<td>10.361</td>
<td>54.704</td>
<td>10.030</td>
<td>57.765</td>
<td>10.545</td>
<td>53.050</td>
<td>11.985</td>
<td>3.351</td>
<td>0.023</td>
</tr>
</tbody>
</table>
Table 12

Analysis of Variance Results for the Men’s Samples on the Validity and Clinical Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>SM(N=3)</th>
<th>Sm(N=3)</th>
<th>sM(N=8)</th>
<th>sm(N=5)</th>
<th>F</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>46.337</td>
<td>9.452</td>
<td>44.000</td>
<td>5.568</td>
<td>48.750</td>
<td>9.083</td>
<td>45.000</td>
</tr>
<tr>
<td>F</td>
<td>105.000</td>
<td>18.028</td>
<td>58.000</td>
<td>6.083</td>
<td>70.375</td>
<td>20.549</td>
<td>54.600</td>
</tr>
<tr>
<td>K</td>
<td>33.333</td>
<td>1.528</td>
<td>47.000</td>
<td>6.000</td>
<td>42.625</td>
<td>11.109</td>
<td>42.200</td>
</tr>
<tr>
<td>?</td>
<td>0.333</td>
<td>0.577</td>
<td>0.667</td>
<td>1.155</td>
<td>0.250</td>
<td>0.707</td>
<td>0.600</td>
</tr>
<tr>
<td>1(Hs)</td>
<td>85.000</td>
<td>18.520</td>
<td>62.667</td>
<td>21.008</td>
<td>58.375</td>
<td>13.480</td>
<td>56.800</td>
</tr>
<tr>
<td>2(D)</td>
<td>84.333</td>
<td>18.877</td>
<td>75.000</td>
<td>7.550</td>
<td>71.125</td>
<td>16.340</td>
<td>67.200</td>
</tr>
<tr>
<td>3(Hy)</td>
<td>82.333</td>
<td>21.907</td>
<td>60.667</td>
<td>15.948</td>
<td>59.750</td>
<td>14.985</td>
<td>56.400</td>
</tr>
<tr>
<td>4(Pd)</td>
<td>76.000</td>
<td>26.000</td>
<td>77.333</td>
<td>16.803</td>
<td>65.750</td>
<td>14.7</td>
<td>63.800</td>
</tr>
<tr>
<td>5(Mf)</td>
<td>54.333</td>
<td>4.042</td>
<td>63.000</td>
<td>13.000</td>
<td>54.750</td>
<td>10.306</td>
<td>56.400</td>
</tr>
<tr>
<td>6(Pa)</td>
<td>88.333</td>
<td>24.007</td>
<td>50.375</td>
<td>4.042</td>
<td>69.375</td>
<td>17.832</td>
<td>60.000</td>
</tr>
<tr>
<td>7(Pr)</td>
<td>86.000</td>
<td>8.544</td>
<td>65.667</td>
<td>12.583</td>
<td>61.000</td>
<td>16.000</td>
<td>72.000</td>
</tr>
<tr>
<td>8(Sc)</td>
<td>104.333</td>
<td>19.348</td>
<td>63.667</td>
<td>5.774</td>
<td>70.875</td>
<td>22.113</td>
<td>64.600</td>
</tr>
<tr>
<td>9(Ma)</td>
<td>68.667</td>
<td>14.295</td>
<td>61.667</td>
<td>13.317</td>
<td>58.000</td>
<td>11.136</td>
<td>54.800</td>
</tr>
<tr>
<td>0(Si)</td>
<td>67.000</td>
<td>16.703</td>
<td>59.000</td>
<td>13.454</td>
<td>62.125</td>
<td>14.961</td>
<td>60.600</td>
</tr>
</tbody>
</table>
Table 13

ANOVA For the Four Treatment Samples on Selected MMPI-2 Scales Supplementary Scales (Women Only)

<table>
<thead>
<tr>
<th>Scales</th>
<th>SM(N=30)</th>
<th>Sm(N=27)</th>
<th>sM(N=17)</th>
<th>sm(N=20)</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>PK(PTSD)</td>
<td>70.074</td>
<td>12.881</td>
<td>66.074</td>
<td>10.034</td>
<td>65.625</td>
<td>20.216</td>
</tr>
<tr>
<td>A</td>
<td>65.091</td>
<td>9.318</td>
<td>60.100</td>
<td>9.845</td>
<td>63.200</td>
<td>14.172</td>
</tr>
<tr>
<td>Re</td>
<td>41.000</td>
<td>8.160</td>
<td>42.138</td>
<td>9.635</td>
<td>42.609</td>
<td>8.622</td>
</tr>
<tr>
<td>MDS</td>
<td>64.611</td>
<td>13.245</td>
<td>70.667</td>
<td>9.425</td>
<td>67.059</td>
<td>15.299</td>
</tr>
<tr>
<td>AAS</td>
<td>65.278</td>
<td>18.359</td>
<td>69.810</td>
<td>14.372</td>
<td>60.059</td>
<td>12.286</td>
</tr>
<tr>
<td>APS</td>
<td>58.278</td>
<td>10.075</td>
<td>59.429</td>
<td>9.755</td>
<td>52.118</td>
<td>9.669</td>
</tr>
<tr>
<td>Si1</td>
<td>60.333</td>
<td>10.514</td>
<td>52.000</td>
<td>13.594</td>
<td>56.391</td>
<td>9.889</td>
</tr>
<tr>
<td>Si2</td>
<td>56.926</td>
<td>10.095</td>
<td>53.385</td>
<td>11.089</td>
<td>53.826</td>
<td>11.684</td>
</tr>
<tr>
<td>Si3</td>
<td>57.000</td>
<td>8.762</td>
<td>56.692</td>
<td>9.469</td>
<td>60.348</td>
<td>12.357</td>
</tr>
</tbody>
</table>

A: Anxiety
RE: Social visibility
MDS: Marital stress
AAS: Addiction Admission
APS: A Potential Scale
Si1: Shyness/Self-consciousness
Si2: Social Avoidance
Si3: Alienation-Self and Others
Forty-two percent of inpatients in the SM group completed a valid MMPI-2, while eleven percent completed an invalid profile. Sixteen percent had refused to take the test. Thirty-one percent had no record of a report in their chart, bringing the possible total of refusals to forty-seven percent of the total group.

Sixty-two percent of the Sm completed a valid MMPI-2, while five percent had completed invalid profiles. Fourteen percent refused to complete the assessment. Five percent had completed a previous valid MMPI. Fourteen percent had no record of a report, bringing the possible total of refusals to twenty-nine percent of the total group.

Ninety-two percent of the inpatients in the sM group completed a valid MMPI-2, while eight percent completed an invalid profile. This group was not assessed for refusals.

As the sm group was also the control group, only valid MMPI-2 protocols were used. However, it was noted by observation that invalid protocols rarely occurred in this group.

Clinical and Validity Scales

The females in the SM group showed significantly greater elevations than the control group (sm) on Scales F, 4, 6, 8, and 0, with additional greater elevations above the Sm group on Scales F and 0. They had significantly fewer deviant responses than the sM group on the ? scale (See Table 11). Due to a small sample size of males in all groups, the analysis for significance is guarded. However, an examination of Table 12 shows that, although sample sizes were small, on the average, men who were both sexually abused and self-mutilating appeared to have more severe psychopathology than the other three groups. The males in the SM group showed greater elevations than the control group (sm) on Scales F, 1, 6, and 8, with additional greater elevations above
the Sm males on Scales F, 6, and 8, and greater elevations than the sM group on Scales F, 7, and 8 (see Table 12).

**Self-harm**

All females who self-mutilated scored significantly higher than the control group on the MMPI-2 Scales F, 4 and 8. The individuals who utilized one method of self-harm had a significantly greater score on the MMPI-2 Scale F. Those who had used two methods scored significantly higher than those who used one or three methods on Scales F, 8, and 0.

**Elevated Scales by Group**

The predominant elevated profile (valid and invalid profiles) for the sm group included Scale 2 (79%), followed by Scale 4 (76%), Scale 8 (73%), Scale 6 (70%), Scale 7 (67%), and Scales 1 and 10 (55%). Scale 3 was elevated for 49% of the profiles, while Scale 9 was elevated for 24%. Six percent of the profiles (both female) revealed an elevated Scale 5.

Scale 4 was predominantly (70% of valid, invalid, and MMPI profiles) elevated for the Sm group, followed by Scale 2 (60%), and Scale 8 (57%). Scales 3 and 7 were elevated in 40% of the profiles, whereas Scales 1 (37%), 6 (33%), and 9 (27%) were elevated in approximately one-third of the profiles. Scale 10 was elevated 17% of the time, while Scale 5 was elevated in the protocols of two females and two males.

Scales 2 and 8 were the predominant (64%) elevations for the sM group, followed by Scale 4 (56%) and Scale 7 (48%). Scales 1, 3, and 6, were considerably lower (40%), while 28% had elevations on Scales 9 and 10. Scale 5 was elevated in 12% (2 males; 1 female) of the protocols (valid and invalid).
High Codes

Scale 8 was included in 57.6% of the high-three-codes within the SM group, while Scale 2 was included in 51.5% of the three most elevated scales for each protocol. Approximately one-third included elevations on Scale 6 (39%), Scale 7 (36.4%), Scale 4 (33%), Scale 1 (30%), or Scale 3 (30%). Only 18% of the protocols included Scale 10 in the three highest scales, while 15% included Scale 9. One female's third scale was Scale 5 with a score of 60.

Scale 4 was included in 66.7% of the high-three-codes within the Sm group, whereas Scale 2 was included in 53.3% of the codes. Scale 8 was included in 36.7% of the three most elevated scales. Approximately one-third of the highcodes included Scale 6 or Scale 7, while Scale 3 was included in 26.7% of the protocols. Twenty percent of the highcodes included Scale 1, and 16.7% included either Scale 9 or Scale 10. Two male and two female protocols (13%) included Scale 5 in their highcode.

Scale 4 was also included predominantly (60%) in the highcode profile in the sM group, followed by Scale 2 (56%), and Scale 8 (52%). Scales 2 and 7 were the predominant scales (52%) included in the highcodes of the "sm" group, followed by Scales 3 (40%) and 4 (40%).

Supplementary Scales

The three treatment groups had significantly lower elevations on RE than the control group (See Table 13). The SM group means were greater than the Sm and sm groups on Si1. The Sm group revealed greater elevations than the control group on MDS. Tables 13 and 14 present data relevant to the Supplementary Scales.
### Table 14

**Statistically Significant Chi Square Test For Associational Differences on Selected MMPI-2 Scales (T-Score > 65) (Women Only)**

<table>
<thead>
<tr>
<th>Group</th>
<th>SM</th>
<th>Sm</th>
<th>sM</th>
<th>sm</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scales</td>
<td>%&lt;65</td>
<td>%&gt;65</td>
<td>%&lt;65</td>
<td>%&gt;65</td>
<td>%&lt;65</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>F</td>
<td>30.0</td>
<td>70.0</td>
<td>51.9</td>
<td>48.1</td>
<td>47.1</td>
</tr>
<tr>
<td>RE</td>
<td>46.7</td>
<td>53.3</td>
<td>85.2</td>
<td>14.8</td>
<td>76.5</td>
</tr>
<tr>
<td>MDS</td>
<td>29.4</td>
<td>70.6</td>
<td>17.9</td>
<td>73.7</td>
<td>30.8</td>
</tr>
<tr>
<td>AAS</td>
<td>52.9</td>
<td>47.1</td>
<td>42.1</td>
<td>57.9</td>
<td>92.3</td>
</tr>
<tr>
<td>Si1</td>
<td>50.0</td>
<td>50.0</td>
<td>87.5</td>
<td>12.5</td>
<td>81.3</td>
</tr>
<tr>
<td>Si3</td>
<td>84.6</td>
<td>15.4</td>
<td>75.0</td>
<td>25.0</td>
<td>37.5</td>
</tr>
<tr>
<td>LSE</td>
<td>43.3</td>
<td>56.7</td>
<td>76.0</td>
<td>24.0</td>
<td>41.2</td>
</tr>
<tr>
<td>SOD</td>
<td>50.0</td>
<td>50.0</td>
<td>84.0</td>
<td>16.0</td>
<td>76.5</td>
</tr>
<tr>
<td>Pdl</td>
<td>65.4</td>
<td>34.6</td>
<td>34.6</td>
<td>65.4</td>
<td>56.3</td>
</tr>
<tr>
<td>Sc1</td>
<td>44.4</td>
<td>55.6</td>
<td>57.7</td>
<td>42.3</td>
<td>50.0</td>
</tr>
</tbody>
</table>

RE: Social Responsibility  
MDS: Marital Distress  
AAS: Addiction Admission  
Si1: Social Alienation-Self and Others  
Si3: Alienation-Self and Others  
LSE: Low Self-Esteem  
Pdl: Familial Discord  
SOD: Social Discomfort
The three treatment groups (SM, Sm, sM) had greater elevations than the control group (sm) on the FAM scale. The self-harming groups showed greater elevations than the control group on: DEP, ASP, LSE, SOD, and TRT. The SM group was significantly greater than the Sm and sm groups on the Content Scales, HEA and SOD. The SM group also had greater elevations than the control group on WRK. In addition, the sM was greater than the control group on CYN.

Harris-Lingoes Subscales

Both of the self-mutilating groups had significantly greater elevations than the control group on Sc1, while the SM group only showed significantly greater elevations on Pd2. In addition, the SM group was significantly less than the control group on Hy1. Groups Sm and sM had significantly greater elevations than the control group on Pd1. All other scale differences were insignificant. (See Table 16)

Conclusion

As data in Tables 11, 12, 13, 14, 15, and 16 shows, individuals who were both sexually abused and self-mutilating did show more severe psychopathology than the other three groups, in that there were significant differences between the control group and the SM group on the number of invalid profiles, on the Validity and Clinical Scales (F, ?, 4, 1, 6, 7, 8, 0), and on one Supplementary Scales (RE), eight Content Scales (DEP, HEA, ASP, SOD, FAM, WRK, and TRT; LSE), and four Harris-Lingoes subscales (Si1, Sc1, Pd2; Hy1, Hy4). In addition, the SM group had significantly greater elevations than the Sm group on two Content Scales (HEA, SOD) and on one subscale (Si1). Therefore this hypothesis is generally supported.
Table 15

ANOVA for the Four Treatment Groups on Selected MMPI-2 Content Scales (Women Only)

<table>
<thead>
<tr>
<th>Group</th>
<th>SM(N=30)</th>
<th>Sm(N=27)</th>
<th>sM(N=17)</th>
<th>sm(N=20)</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP</td>
<td>71.546</td>
<td>10.494</td>
<td>65.200</td>
<td>10.886</td>
<td>70.440</td>
<td>15.232</td>
</tr>
<tr>
<td>HEA</td>
<td>66.546</td>
<td>15.808</td>
<td>58.700</td>
<td>13.466</td>
<td>60.400</td>
<td>13.373</td>
</tr>
<tr>
<td>ANG</td>
<td>60.667</td>
<td>11.483</td>
<td>58.444</td>
<td>10.017</td>
<td>56.120</td>
<td>13.785</td>
</tr>
<tr>
<td>BIZ</td>
<td>59.969</td>
<td>17.067</td>
<td>54.741</td>
<td>8.947</td>
<td>57.040</td>
<td>12.578</td>
</tr>
<tr>
<td>ASP</td>
<td>58.727</td>
<td>11.851</td>
<td>54.778</td>
<td>10.639</td>
<td>59.480</td>
<td>9.509</td>
</tr>
<tr>
<td>LSE</td>
<td>64.667</td>
<td>10.092</td>
<td>58.778</td>
<td>9.406</td>
<td>63.920</td>
<td>14.905</td>
</tr>
<tr>
<td>SOD</td>
<td>62.303</td>
<td>13.159</td>
<td>55.000</td>
<td>12.413</td>
<td>57.880</td>
<td>11.987</td>
</tr>
<tr>
<td>WRK</td>
<td>66.273</td>
<td>12.716</td>
<td>59.852</td>
<td>8.986</td>
<td>64.040</td>
<td>15.241</td>
</tr>
<tr>
<td>TRT</td>
<td>65.091</td>
<td>11.170</td>
<td>61.370</td>
<td>10.902</td>
<td>67.240</td>
<td>15.501</td>
</tr>
<tr>
<td>CYN</td>
<td>54.424</td>
<td>11.292</td>
<td>54.630</td>
<td>10.112</td>
<td>58.000</td>
<td>11.343</td>
</tr>
</tbody>
</table>

Note: All other Content Scales were found to be nonsignificant.

Note:
DEP: Depression  ASP: Antisocial Practice  WRK: Work Interference
HEA: Health Concerns LSE: Low Self-Esteem  TRT: Negative Treatment
ANG: Anger  SOD: Social Discomfort  CYN: Cynicism
BIZ: Bizarre Mentation  FAM: Family Problems
Table 16

**ANOVA on Selected Harris-Lingoes MMPI-2 Scales (Women Only)**

<table>
<thead>
<tr>
<th>Scales</th>
<th>SM(N=3G) M</th>
<th>SD</th>
<th>Sm(N=27) M</th>
<th>SD</th>
<th>sM(N=17) M</th>
<th>SD</th>
<th>sm(N=20) M</th>
<th>SD</th>
<th>F Ratio</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>70.222</td>
<td>11.036</td>
<td>65.483</td>
<td>12.699</td>
<td>67.583</td>
<td>18.664</td>
<td>63.520</td>
<td>14.440</td>
<td>1.056</td>
<td>0.371</td>
</tr>
<tr>
<td>D2</td>
<td>59.889</td>
<td>10.028</td>
<td>55.724</td>
<td>12.920</td>
<td>59.435</td>
<td>9.765</td>
<td>59.360</td>
<td>9.371</td>
<td>0.911</td>
<td>0.439</td>
</tr>
<tr>
<td>Hy1</td>
<td>42.889</td>
<td>10.711</td>
<td>47.862</td>
<td>10.049</td>
<td>43.609</td>
<td>11.040</td>
<td>49.760</td>
<td>10.729</td>
<td>2.506</td>
<td>0.063</td>
</tr>
<tr>
<td>Hy4</td>
<td>64.778</td>
<td>15.964</td>
<td>59.034</td>
<td>14.932</td>
<td>58.044</td>
<td>14.791</td>
<td>54.680</td>
<td>11.807</td>
<td>2.191</td>
<td>0.094</td>
</tr>
<tr>
<td>Hy5</td>
<td>48.852</td>
<td>9.941</td>
<td>46.793</td>
<td>9.439</td>
<td>49.000</td>
<td>10.251</td>
<td>52.800</td>
<td>8.312</td>
<td>1.829</td>
<td>0.140</td>
</tr>
<tr>
<td>Pa1</td>
<td>63.3</td>
<td>15.876</td>
<td>59.069</td>
<td>10.853</td>
<td>65.652</td>
<td>19.570</td>
<td>54.760</td>
<td>12.607</td>
<td>2.516</td>
<td>0.060</td>
</tr>
<tr>
<td>Pa2</td>
<td>61.1</td>
<td>9.664</td>
<td>57.690</td>
<td>9.423</td>
<td>62.000</td>
<td>13.628</td>
<td>54.960</td>
<td>11.393</td>
<td>2.120</td>
<td>0.100</td>
</tr>
<tr>
<td>Pd2</td>
<td>59.519</td>
<td>13.938</td>
<td>58.448</td>
<td>11.099</td>
<td>53.478</td>
<td>9.234</td>
<td>51.800</td>
<td>12.244</td>
<td>2.613</td>
<td>0.056</td>
</tr>
<tr>
<td>Pd5</td>
<td>68.741</td>
<td>10.219</td>
<td>68.552</td>
<td>9.375</td>
<td>67.304</td>
<td>11.880</td>
<td>64.000</td>
<td>13.469</td>
<td>0.985</td>
<td>0.403</td>
</tr>
<tr>
<td>Sc1</td>
<td>65.036</td>
<td>12.255</td>
<td>60.414</td>
<td>9.299</td>
<td>66.826</td>
<td>15.851</td>
<td>53.720</td>
<td>11.897</td>
<td>5.574</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: All other H-L scales were found to be nonsignificant.

**Note:**

- **D1:** Subjective Depression
- **D2:** Psychomotor Retardation
- **Hy1:** Denial of Social Anxiety
- **Hy4:** Somatic Complaints
- **Hy5:** Inhibition of Aggression
- **Pa1:** Persecutory Ideas
- **Pa2:** Poignancy
- **Pd1:** Familial Discord
- **Pd2:** Authority Problems
- **Pd5:** Self-Alienation
- **Sc1:** Social Alienation
PARA Results

The third focus of this study involved the correlation of the PARA, specifically created for the assessment of sexual abuse symptomatology and based upon the PTSD model, and the MMPI-2.

**Hypothesis #3**

There is a significant correlational relationship between the PARA and those scales associated with PTSD.

For this hypothesis, the PARA-A Scale and the MMPI-2 Scales associated with PTSD (F, 2, 4, 6, 8, 0, PK, PS) will be examined.

Table 17 shows a significant correlation between PARA-A and Scale 8 (Sc), while PARA-B was significantly correlated to Scales 3, 4, 7, and 8. Table 17 also shows significant correlations between the NEWPARA-A (Items 6, 11, 12, 13, 15, 16, 32, 33, 38, 40, 41, 42, 44, 45, 50, 51, & 54 omitted due to low correlation with the total score) and Scales 2, 3, 4, 6, and 7, while corrected NEWPARA-B (Item 68 omitted) displayed significant correlations with Scales F, 3, 4, 7, and 8. Table 18 displays significant correlations (.01) between the PARA items and the validity, clinical and PTSD (PK, PS) scales of the MMPI-2. Table 7 displays relationships between the PARA-A, PARA-B, duration of abuse, eating disorders, physical abuse, and the number of offenders. Therefore, taking both the NEWPARA and PARA into consideration, this hypothesis is supported.

**Hypothesis #4**

The sexually abused/self-mutilating group show a higher mean on the PARA-A Scale than the sexually abused/no self-mutilating group.
Table 17

Correlation Coefficients for PARA Scales and MMPI-2 Validity, Clinical, and Posttraumatic Stress Scales For the SM and Sm Women Samples Combined

<table>
<thead>
<tr>
<th>MMPI-2 Scales</th>
<th>PARA-A</th>
<th>PARA-B</th>
<th>NEWPARA-A</th>
<th>NEWPARA-B</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>61</td>
<td>(SM only = 10)</td>
<td>28</td>
<td>(SM only = 10)</td>
</tr>
<tr>
<td>L</td>
<td>-0.268</td>
<td>0.101</td>
<td>-0.292</td>
<td>0.115</td>
</tr>
<tr>
<td>F</td>
<td>0.391</td>
<td>0.399</td>
<td>0.075</td>
<td>0.397</td>
</tr>
<tr>
<td>K</td>
<td>0.177</td>
<td>0.050</td>
<td>-0.014</td>
<td>0.027</td>
</tr>
<tr>
<td>?</td>
<td>0.070</td>
<td>-0.408</td>
<td>0.387</td>
<td>-0.400</td>
</tr>
<tr>
<td>1 (Hs)</td>
<td>0.291</td>
<td>0.375</td>
<td>0.267</td>
<td>0.376</td>
</tr>
<tr>
<td>2 (D)</td>
<td>0.263</td>
<td>0.509</td>
<td>0.690*</td>
<td>0.506</td>
</tr>
<tr>
<td>3 (Hy)</td>
<td>0.234</td>
<td>0.529*</td>
<td>0.771*</td>
<td>0.523*</td>
</tr>
<tr>
<td>4 (Pd)</td>
<td>0.383</td>
<td>0.703**</td>
<td>0.836*</td>
<td>0.697**</td>
</tr>
<tr>
<td>5 (Mf)</td>
<td>-0.061</td>
<td>-0.478</td>
<td>-0.369</td>
<td>-0.472</td>
</tr>
<tr>
<td>6 (Pa)</td>
<td>0.425</td>
<td>0.369</td>
<td>0.882**</td>
<td>0.375</td>
</tr>
<tr>
<td>7 (Pt)</td>
<td>0.398</td>
<td>0.567*</td>
<td>0.748*</td>
<td>0.550*</td>
</tr>
<tr>
<td>8 (Sc)</td>
<td>0.553*</td>
<td>0.574*</td>
<td>0.499</td>
<td>0.566*</td>
</tr>
<tr>
<td>9 (Ma)</td>
<td>0.179</td>
<td>-0.127</td>
<td>-0.251</td>
<td>-0.133</td>
</tr>
<tr>
<td>0 (Si)</td>
<td>-0.129</td>
<td>0.050</td>
<td>-0.332</td>
<td>0.028</td>
</tr>
<tr>
<td>PK</td>
<td>0.302</td>
<td>0.439</td>
<td>0.641</td>
<td>0.444</td>
</tr>
<tr>
<td>PS</td>
<td>0.317</td>
<td>0.463</td>
<td>0.591</td>
<td>0.470</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01

Data in Table 19 shows that women who were both sexually abused and self-mutilating had higher scores on the PARA-A, and on the NEWPARA-A. In addition, significant differences among the groups were found on specific PARA items. Therefore, this hypothesis is supported.
Table 18

Significant Correlations (.01) between PARA Items and the Validity, Clinical, and PTSD (PK,PS) MMPI-2 Scales

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Group</th>
<th>SM</th>
<th>Sm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td></td>
<td>-.78 (?)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>.96 (S4)</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>.88 (PS)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>.97 (F)</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>-.96 (PK) -.99 (PS)</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
<td>.77 (S3)</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td></td>
<td>.85 (S3)</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td></td>
<td>.83 (F)</td>
<td>.82 (?)</td>
</tr>
<tr>
<td>53</td>
<td></td>
<td>-.83 (K)</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>-.72 (S8)</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>.82 (S4)</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td></td>
<td>.85 (S6)</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td>.86 (S3)</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td></td>
<td>.86 (S3)</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td></td>
<td>.96 (S1)</td>
<td>.92 (S2) .80 (S3)</td>
</tr>
<tr>
<td>75</td>
<td></td>
<td>.87 (PS) .91 (S8)</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td></td>
<td>.96 (S1)</td>
<td></td>
</tr>
</tbody>
</table>
Table 19

Comparison Between Sexually Abused Groups of the Means for the PARA and NEWPARA Scales (Women Only)

<table>
<thead>
<tr>
<th>Scales</th>
<th>SM M</th>
<th>SM SD</th>
<th>Sm M</th>
<th>Sm SD</th>
<th>t Value</th>
<th>Signif.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARA-A</td>
<td>(N=41) 248.683</td>
<td>41.585</td>
<td>(N=20) 211.200</td>
<td>43.405</td>
<td>3.21</td>
<td>0.003</td>
</tr>
<tr>
<td>NEWPAR-A</td>
<td>(N=19) 174.895</td>
<td>24.208</td>
<td>(N=9) 126.839</td>
<td>31.656</td>
<td>3.37</td>
<td>0.003</td>
</tr>
</tbody>
</table>
CHAPTER IV
DISCUSSION

The current research examined the significant differences between sexually abused victims with (SM) and without a history of self-harm (Sm), versus non-abused patients with (sM) and without (sm) a history of self-harm, with the hypotheses that those with a history of abuse and self-harm experienced more trauma and increased PTSD, and therefore, increased elevations (related to PTSD) on the MMPI-2 scales and the sexual-abuse-specific PARA.

Previous PTSD research had found the frequently elevated 28/82 profile (Fairbank, Keane, & Malloy, 1983; Kulka & Schiengcr, 1987) or 2-8-7/8-2-7 profile (Burke & Mayer, 1985; Butler, Foy, Snodgrass, Hurwicz, & Goldfarb, 1986; Foy, Sippelle, Rueger, & Carroli, 1984; Hyer, Fallon, Harrison, & Boudewyns, 1987; Keane, Malloy, & Fairbank, 1984; Kulka & Schleenger, 1986), with one study (Roberts, Penk, Gearing, Robinowitz, Dolan, & Patterson, 1982) finding a 8-2-4-7 profile for those with PTSD. In addition, previous research involving sexual abuse victims showed an elevated 4-8 profile (Meiselman, 1980; Scott & Stone, 1986a, 1986b; Tsai, et al, 1979), with one study including an elevated Scale 2 (Briere & Zaidi, 1989).

The present research, however, found the more frequently elevated profiles (60% or greater) of 2-4-8-6-7 for the SM group, 4-2 for the Sm group, and 2-8 for the sM group, indicating that the self-harming groups are similar to previous PTSD studies.
with the SM group displaying elevations most like previous PTSD and sexual abuse profiles.

**Significant differences were not found between the groups on the PTSD-related scales, PK and PS.** This may be due to the fact that the PTSD scales were created for and normed on male veterans, rather than on the predominantly female sexual abuse population (Graham, 1990; Keane, et. al., 1982, 1987a). They also are saturated with measures of maladjustment and emotional distress, factors commonly found in psychiatric inpatients (Greene, 1991). The current findings support Greene's (1991) conclusion that further research on the two scales to include specific subcategories (i.e., female abuse victims) is needed.

**Significant differences were found for both sexually abused groups on Scales F and 4, indicating greater psychopathology, antisocial attitudes, hostility, and rage.** Both sexually abused groups also showed significant differences on scales related to marital and family problems possibly related to family of origin dysfunction and experience. It is also important to note that the Sm group showed a significant elevation on Pd1, which relates to the family of origin and the possibility of abuse. Therefore, the hypothesis regarding the existence of PTSD within the sexually abused groups was partially supported.

**There also appeared to be several differences between the two sexually-abused groups, with the SM group comparing favorably with previous PTSD and sexual abuse research.** The SM group displayed significant differences on Scales F, 4, 6, 8, and 0, as well as significant differences on several scales related to depression, antisocial behavior, family problems, social and work difficulties, poor treatment outcome, health concerns, and low self-esteem, all related to PTSD. There was a greater incidence of invalid or refused MMPI-2 assessments, greater history of previous treatment and physical abuse, and more frequent use of Prozac and other antidepressants in treatment. Therefore, the
hypothesis that sexually abused individuals who also self-harm will show significantly
greater psychopathology and trauma, was supported.

Results indicate that individuals within the SM group experience schizoid and
psychotic processes, including confusion, poor attention, poor concentration, memory
difficulties, cognitive disengagement, dissociation, intrusive flashbacks, nightmares,
hallucinations, poor reality contact, bizarre sensory symptoms, and inadequate problem-solving skills. They also experience low self-esteem, self-criticism, depression, anger,
hypervigilance, persistent symptoms of increased arousal, general and phobic anxiety,
paranoia, hostility, and identity problems. They fear loss of control, and frequently turn
to self-mutilation, alcohol, food, or drugs. They have more somatic concerns, fatigue,
sleep disturbances, family problems, childhood abuse, work interference, and negative
attitudes towards treatment. They also experience greater sexual dysfunction. The
females in the group exhibited greater hostility, antisocial behavior, introversion,
withdrawal and discomfort. They also avoid close relationships, fearing additional harm.
The men were more insecure, anxious, hypochondriacal, rigid, self-centered, bitter,
Briere, Cotman, Harris, and Smiljanich, 1992; Briere & Runtz, 1987; Bryer, et al., 1987;
Davidson & Foa, 1993; Finkelhor, 1986; Gelinas, 1983; Gil, 1990; Graham, 1990;
Greene, 1991; Herman, 1992; Kinzie, Fredrickson, & Ben, 1984; Lindberg & Distad,
1985a, 1985b; McLeer, Deblinger, Atkins, Foa, & Ralphe, 1988; Tennent, Goulston, &
Dent, 1986).

PARA

Both hypotheses related to the PARA were generally supported. Significant
correlations were found between PARA-A and Scales F, 8, 0, PK, and PS, all of which
had been found to be significantly elevated in previous PTSD studies, supporting the
hypothesis that the PARA draws upon experiences of post-traumatic stress and therefore would be highly correlated to PTSD. In addition, significant relationships were found between the PARA-A, PARA-B, duration of abuse, eating disorders, and physical abuse, further supporting the indication that high-scorers have experienced a greater degree of traumatic stress. Women who were both sexually abused and self-mutilating had significantly higher scores than the sexually abused/non-self-harming women on the PARA-A and on the NEW PARA-A, indicating that they appear to display greater psychopathology, and supporting the hypothesis that there would be significant differences between the two groups.

It therefore appears that those exhibiting greater scores on the PARA, (or the SM group) would display behaviors similar to PTSD, including anxiety, depression, confusion intrusive thoughts, poor concentration, memory difficulties, bizarre sensory experiences, dissociation, poor judgment, reduced reality contact, problem-solving skills, fear of loss of emotional and cognitive control, social discomfort, and withdrawal). Consequently, the PARA could be helpful in determining degree of symptomatology and additional treatment information about the patient who has been sexually abused.

Implications For Psychotherapy and Diagnosis

The results of this study support the utilization of the PTSD theory regarding abuse, and identify those who have experienced more severe levels of PTSD (Briere, 1992; Herman, 1992b; & Sgroi, 1989). Briere (1992) advises that, in working with the sexually abused individual, the clinician assess a number of factors related to the current degree of PTSD, including: 1) the balance between exploration of potentially distressing material and the need to provide support and consolidation, 2) intensity control, 3) decisions about when to focus on present concerns versus historical events, 4) the negotiation of client "resistance", 5) intrusive symptoms (flashbacks or nightmares), 6)
current internal psychological state, including the use of dissociation or other defenses, and 7) level of appropriate affect (p.98-106). He advises "...it (is) useful to weigh the extent of intrusive symptomatology, level of dissociation, and extent of painful affect (e.g. anxiety, depression, or anger) against the client's available psychological resources or capacities. If the survivor appears to be in crisis, besieged by acute posttraumatic symptoms, or deeply dissociated, the decision is usually to focus on stabilization and support...validating and normalizing the client's current experience, consolidating previous progress, and work with the client to increase feelings of safety and control” (Briere, 1992, p. 102).

Strategies for therapy with sexual abuse victims frequently include, within a trusting therapeutic relationship, a re-experiencing of the trauma and a direct confrontation of disturbing memories and associated feelings which were generated while experiencing a traumatic event (Briere, 1989; Gil, 1990; Scurfield, 1985; & Walker, 1988). Clients are asked to integrate cognitive, affective, and physiological responses, thereby creating full memory and an ability to process previously repressed material. This tends to elicit fear, anxiety, and pain, therefore the treatment must be carefully designed to consider the client's ability to cope. Behavioral techniques such as imaginal flooding and implosive therapy may also work for those whose Scale 8 is not significantly elevated (Black and Keane, 1982; Fairbank & Keane, 1982; Keane & Kaloupek, 1982; & Miniszek, 1984).

The current results can be helpful in not only determining which group (SM or Sm) the patient may belong to, but also the degree of pathology, the level of dissociation and/or disorientation, anxiety, or potentially self-harming symptomatology (regarding the degree of elevation on Scales F, 6, and 8) presently experienced by the patient. Based upon the current research, if the individual is in the SM group, with Scales F, 2, 4, 6, 8, and 0 elevated, and an additional elevation on the PARA, there is a greater chance of the patient being confused, experiencing distress, dissociating, and using self-harm as a
coping mechanism to elevate the internal stress. In addition, if Scale 0 is elevated, the patient may withdraw and attempt to secretly self-harm. It was also noted that, when a patient was experiencing extreme distress, heightened emotional awareness, flooding of memories, and/or dissociation, the patient tended to either refuse the test or have invalid test results.

Because of the significant differences exhibited by the SM group, including psychotic-like or PTSD symptomatology, the therapy consists of guiding the patient through tolerable doses of awareness, processing, and normalization. The emergence of repressed memories, especially those that counter the individual’s previously held memories or wishes of what childhood or significant relationships were like, or when extremely violent or sadistic memories surface, may cause the person to experience increased cognitive and affective distress, leaving the patient to feel threatened, vulnerable, out of touch with reality, fearing loss of control, and leading to self-destructive behavior. Potentially overwhelming affective responses require active interventions to allow interpretations and clarification of memories, and to reduce feelings of powerlessness. When the sexually abused/self-harming patient shows signs of decompensation, regression, or psychosis, the work in therapy must include 1) an evaluation of the patient’s coping ability, 2) an evaluation of the psychological impact of the material being processed, 3) a reduction in the patient’s level of confusion, 4) attention given to client safety and trust, and 5) the client’s sense of readiness to go on.

Useful techniques in working with and providing control for those in the SM group with severe PTSD include: 1) systematic desensitization (Cellucci & Lawrence, 1978); 2) thought-stopping; 3) cognitive restructuring; 4) behavioral bibliotherapy (Marafiote 1980; Parson, 1984); and 5) hierarchical routes of behavior (Horowitz & Solomon, 1975) may also be useful techniques in working with and providing control for those in the SM
group with severe PTSD. In addition, techniques to strengthen self-esteem and social skills may be of help to the females in the SM group with an elevated Scale 0.

Finally, once self-harm has been discovered through self-disclosure, inquiry of the clinician, or based upon the current research (elevated Scales F, 2, 4, 6, 8, 0, specific subscales, and elevated PARA), there is reason to suspect the behavior. The underlying goal in treatment is to stop the mutilation and to make the self-mutilating behavior open and ego dystonic (Gil, 1990). This is done by questioning the behavior, reviewing it from different perspectives to determine how and why it is done, and then providing clear directives designed to break up the motivators that trigger the abuse. Ignoring or minimizing self-mutilation may elicit escalation of the behavior, rather than understanding, or controlling and diminishing it by developing internal motivations rather than relying on external motivators, such as the therapist’s directives.

**Standardized Instruments.** Previous researchers recommended that, not only the MMPI/2 basic scales (validity and clinical) be reviewed by clinicians, but also the content, special scales, critical items, etc., should be examined in order to clarify and increase the interpretation of the results (Briere, 1989; Roland, et al., 1988, 1989). The current research indicates that, due to significant differences between sexually abused/self-harming and sexually abused/non-self-harming individuals, review of the additional scales, subscales and critical items is warranted. In addition, it has been recommended that abuse-specific instruments need to be developed or standardized, therefore the results regarding the PARA can also be helpful in assessing the degree of trauma or symptomatology, as well as in assisting in the planning of treatment.

**Limitations and Recommendations**

This research was designed on the conceptual basis of sexual abuse as a traumatic event (PTSD), similar to work done previously by Gelinas (1983) and Briere (1989), and
is therefore limited to this theoretical base. Further research, including the concept of sexual abuse as a unique subcategory of PTSD, is recommended.

Due to the limitations upon access to subjects (victims involved at a psychiatric hospital in New York), and non-randomized sampling, this study may not be indicative of the general population. Although control groups of non-abused, inpatients were used, this study did not include a control group from the general population of individuals without a history of treatment or hospitalization, thus limiting this research to a comparison of only those individuals seeking inpatient treatment at this time. Although control or comparison groups have often not been included in research related to sexual abuse, additional studies including random sampling from a more diversified or increased area more indicative of the general population, would increase the generalizability of the research. Also, the present study is limited in that, as in most previous studies, sample sizes are small and the effect of one individual is too easily significant (See also Blume, 1990; Gil, 1990; Scott & Stone, 1986a & b; Swett, Surrey, Cohen, 1990; VanderMey and Neff, 1986).

Selection bias, including type of sample, sex, and race, is another limitation frequently found in this type of research. The current study contained primarily white female inpatients at a psychiatric hospital, which is the most common type of sample (Briere, 1989; Finkelhor, 1986; Herman, 1981; Meiselman, 1978; VanderMey and Neff, 1986; Walker, 1988). Only a small percentage of actual sexual abuse incidents are reported, and most victims do not seek professional help (Burnam, Stein, Golding, Siegel, Sorenson, Forsythe, & Telles, 1988). As a result, these cases may not be indicative of victims' experiences in general in that treatment groups often include people with more serious problems (Conte, 1984; Finkelhor, 1984; Walker, 1988).

In addition, because the psychiatric hospital included in the present research serves primarily white middle class individuals and the majority of the sexually abused patients
were female, this study is limited in its generalizability to men and those of other races. There has been controversy as to whether boys react to abuse differently than girls (Briere, 1989; Rogers & Terry, 1984), and although the current research suggests gender differences, the current findings are limited due to the small number of male subjects. Future studies could include a greater number of male victims, and patients of other racial backgrounds, thus enhancing the generalizability.

The present study, as in the majority of previous studies, involved review of retrospective interviewing of adults in clinical or deviant populations on a one-time basis (Finkelhor, 1986; Gil, 1990; Tong, et al., 1987). The majority of the records are self-reports by victims, which are limited by memory and possible distortion, reluctance to share, and sense of shame, thereby making it difficult to generalize (see also Beck & van der Kolk, 1987; Briere, 1984, 1988; VanderMey & Neff, 1986; Blume, 1990).

Not only is sexual abuse research limited due to possible distorted self-reporting, but additional variables may also confound the issue. These include previous personality issues, familial circumstances, coping patterns (including denial, blocking, regression, repression, or somatic complaints), or other issues not mentioned in the records (including relationship with the mother, family pathology, physical abuse, social isolation, age of onset, the existence of a nurturing personality or "hidden treasure" (Robert A. Carrere, personal communication, 1992), the relationship to the perpetrator, the use of force, resistance by the victim, and whether or not the abuse had been disclosed). Because of the large number of variables, it has been recommended that all research studies of sexual abuse should be oriented towards multivariate analysis (Burnam, et. al., 1988; Finkelhor, 1986). However, a large sample is necessary (preferably ten cases for every variable) making multivariate analysis difficult. Alternatives include: increasing the sample size, using a pre-abuse baseline, collecting a
pre-abuse baseline retrospectively, gathering more complete information about events following the abuse; and longitudinal designs (Beck & VanderKolk, 1987; Gil, 1990).

Finally, the PARA-Personal Assessment of Responses to Abuse is an instrument specifically created by the author, and has not been standardized or included in the literature. However, it has adequate inter-item reliability and concurrent validity with the MMP!-2 with this type of sample. In addition, although the construct validity is tentative, and the instrument could benefit from continued study, the results do show generally that the PARA has the ability to reveal differences between the two sexually abused groups, and could assist in the assessment of pathology and planning of treatment.
APPENDIX A

PARA: FORM A & B
APPENDIX A

PERSONAL ASSESSMENT OF RESPONSES TO ABUSE

Name: ______________________ Date: ______________________
Therapist: __________________ Group: ______________________
Age: ____ Sex: F ____ M ____ Time in Program: ______________

Instructions: This personal assessment of your responses to abuse and or past experiences is to help you assess what is or has been most traumatic for you. It will also be used to evaluate your progress in dealing with those experiences.

Please respond to each statement by circling the number under the heading that most appropriately fits you. Usually it is best to respond with your initial reaction. For example, on question #1, if your are somewhat afraid that you will always be alone, circle 6. If you tend to feel more towards one direction than the other, circle the number closer towards that direction.

1 = Does not apply 2 = Never 3 = Hardly ever 4 = Once in awhile
5 = Half the time 6 = Often 7 = Always

Questions:

1. I am afraid that I will always be alone
2. I am afraid of losing my mind
3. I can protect myself
4. I feel afraid and anxious when I think about the abuse
5. I am afraid that others can hurt me
6. I can control my behavior

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1 = Does not apply  
2 = Never  
3 = Hardly ever  
4 = Once in awhile  
5 = Half the time  
6 = Often  
7 = Always

7. I am fearful that I will never be able to be close to anyone
8. I become frightened when I am alone with someone of the opposite sex
9. I can have close relationships and need not be alone
10. I am afraid that I will lose the control over the anger that I feel inside.
11. I have a right to feel angry
12. I feel angry that someone didn't help me sooner
13. I hate the person who hurt me
14. I want to hurt someone
15. I feel angry and blame my mother for not stopping the abuse sooner.
16. I am disappointed but I don't hate anyone
17. I blame myself for the abuse
18. I feel guilty that I feel so angry
19. I feel angry towards the opposite sex
20. I cannot trust anyone
21. I lost part of my life-I cannot relate to others
22. I trust myself-I feel confident in some areas of my life
23. I do not understand why I was victimized
24. I will always be helpless
25. I do not like being a woman
26. I feel guilty that I didn't tell someone before
27. I hate myself
28. I cannot control my life
29. I lost a lot, but not all.
30. I can relate to others
31. I am being punished for being a bad person
32. Someone else is responsible for the abuse
33. I feel sad that my family life wasn't what I wanted it to be
34. I have bothersome thoughts about the abuse

1234567
1 = Does not apply  5 = Half the time
2 = Never         6 = Often
3 = Hardly ever   7 = Always
4 = Once in awhile

35. I feel that my life is empty
36. I think about the abuse during sexual closeness
37. When I'm in a place or with people who remind me of the abuse, I strongly react.
38. I sleep well at night
39. I have trouble concentrating
40. I don't remember parts of my childhood
41. I have no problem trusting women
42. I feel good about my future
43. I experience times or dreams where the abuse seems to be happening again.
44. I am interested in sex.
45. I often do things on the spur of the moment
46. I sleep with the light on at night.
47. I am unable to become interested in the activities that I used to enjoy.
48. I forget things.
49. I feel detached from life and those around me
50. I am aware of my body sexually.
51. I feel like I have forgotten the past.
52. I seem to be alert for something happening to me.
53. I have headaches for no reason.
54. I am able to remember experiences, childhood, etc.
55. I have difficulty sleeping at night.
Section B:

1 = Does not apply 5 = Half the time
2 = Never 6 = Often
3 = Hardly ever 7 = Always
4 = Once in awhile

Please complete the following questions in the same way as above.

56. I hate myself.  
57. I wish I were dead.  
58. I feel like cutting myself.  
59. I cut myself.  
60. I burn myself.  
61. I pull out my hair.  
62. I am disgusted with myself.  
63. I attempt to block or interrupt negative or bad thoughts or feelings.  
64. I feel empty or bored.  
65. I try not to be left behind by others.  
66. I have difficulty in relationships.  
67. I feel that I am not here or that I am not real.  
68. I feel that I am a good person.  
69. I hit my head or fists against a wall or other object.  
70. I feel like scratching my hands, arms, chest, or stomach.  
71. I scratch my hands, arms, chest, or stomach  
72. I poke myself with pens, or paper clips.  
73. I feel that I am out of touch with reality.  
74. I feel lonely.  
75. I feel that things are unreal.  
76. I feel as if I'm not in my body.  
77. I have injured myself in the following areas: eyes, hands, arms, ears, other:
78. I have done this to myself in order to:
   decrease my anxiety.
   punish myself.
   deal with my feelings of guilt.
   relieve pain (describe the pain:
   to feel alive.
   to get in touch with reality.

I started injuring myself when (describe when you started and why):
REFERENCES


Fritz, G.S., Stoll, K., & Wagner, N.N. (1981). A comparison of males and females who were sexually molested as children. *Journal of Sex and Marital Therapy, 7*(1), 54-59.


Herman, J.L. (1992b). *Trauma and recovery: The aftermath of violence-from domestic abuse to political terror*. New York: Basic Books.


Kwikstat 3.0. (1991). TexaSoft, P.O. Box 1169, Cedar Hill, TX, 75104.


Roland, B.C. & Others. (1989). MMPI correlates of college women who reported experiencing child/adult sexual contact with father, stepfather, or with other persons. *Psychological Reports*, 64(2), 1159-1162.


