EGO MECHANISMS OF DEFENSE AMONG CHILD VICTIMS
OF SEXUAL ABUSE: A TAT ANALYSIS

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements
For the Degree of

MASTER OF SCIENCE

By

Lyn M. Sadler, B.S.
Denton, Texas

December, 1994
EGO MECHANISMS OF DEFENSE AMONG CHILD VICTIMS OF SEXUAL ABUSE: A TAT ANALYSIS

THESIS

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements For the Degree of

MASTER OF SCIENCE

By

Lyn M. Sadler, B.S.
Denton, Texas

December, 1994

Using the Defense Mechanism Manual (Cramer, 1991), Thematic Apperception Test (TAT) stories of 29 sexually abused female subjects and 28 non-abused female clinical control subjects were rated for the frequency of use of denial, projection, and identification. It was found that child victims of sexual abuse rely on denial more frequently, and have higher total defense usage than children who have no documented history of abuse. The forms of denial which differentiated the abuse group from the nonabuse group were misperception and reversal. Frequency of the use of identification did not differ between the groups, however, the form of identification characterizing the abuse group was regulation of motives and behavior. Group patterns of relative defense among four age groups were compared. Results indicated the groups differed in relative use of denial and identification.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Child Sexual Abuse</td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>Risk Factors</td>
<td></td>
</tr>
<tr>
<td>Effects</td>
<td></td>
</tr>
<tr>
<td>Ego Defense Mechanisms</td>
<td></td>
</tr>
<tr>
<td>Classical Psychoanalytic Theory</td>
<td></td>
</tr>
<tr>
<td>Ego Psychology</td>
<td></td>
</tr>
<tr>
<td>Defense Hierarchy Model</td>
<td></td>
</tr>
<tr>
<td>Sexual Abuse and Ego Functioning</td>
<td></td>
</tr>
<tr>
<td>Trauma Theory</td>
<td></td>
</tr>
<tr>
<td>Measurement of Impact of Trauma</td>
<td></td>
</tr>
<tr>
<td>Projective Tests</td>
<td></td>
</tr>
<tr>
<td>Purpose and Significance of Study</td>
<td></td>
</tr>
<tr>
<td>II. METHOD</td>
<td>39</td>
</tr>
<tr>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Measures</td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>III. RESULTS</td>
<td>44</td>
</tr>
<tr>
<td>Characteristics of the Abuse Group</td>
<td></td>
</tr>
<tr>
<td>Preliminary Analysis</td>
<td></td>
</tr>
<tr>
<td>Analysis of Hypotheses</td>
<td></td>
</tr>
<tr>
<td>Post Hoc Analyses</td>
<td></td>
</tr>
<tr>
<td>IV. DISCUSSION</td>
<td>53</td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>Limitations of Study</td>
<td></td>
</tr>
<tr>
<td>APPENDICES</td>
<td>66</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>74</td>
</tr>
<tr>
<td>Table</td>
<td>Summary</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>1.</td>
<td>Summary Scores for Denial, Projection, Identification, and Total Defense for Abuse and Nonabuse Groups</td>
</tr>
<tr>
<td>2.</td>
<td>Interrater Reliability Coefficients for the Individual Forms of Denial, Projection, and Identification</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mean Relative Defense as a Function of Age Group in the Sexual Abuse Group...........71</td>
</tr>
<tr>
<td>2.</td>
<td>Mean Relative Defense as a Function of Age Group in the Nonabuse Group...............72</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

It is generally agreed that there are negative consequences of child sexual abuse (Beitchman, Zucker, Hood, daCosta, Akman & Cassavia, 1992; Briere & Runtz, 1990; Browne & Finkelhor, 1986; Bryer, Nelson, Miller & Krol, 1987; Burgess, Hartman & McCormack, 1987; Harter, Alexander & Neimeyer, 1988; Herman, Russell & Trocki, 1986; Livingston, 1986; Schwartz, Horowitz, & Cardarelli, 1988; Shapiro & Dominiak, 1990; Shengold, 1989; Westen, Ludolph, Misle, Ruffins & Block, 1990; Wolf & Alpert, 1991; Zivney, Nash & Hulsey 1988); however, empirical studies regarding the effects of these trauma are relatively sparse, and the findings are frequently contradictory (Adams-Tucker, 1982; Beitchman et al., 1992; Browne & Finkelhor, 1986; Friedrich, Urquiza, & Beilke, 1986, Wolf & Alpert, 1991). Thus, further empirical study on the subject can serve to benefit the scientific community in identifying, aiding, and understanding the dynamics of the victims of sexual abuse. Although definitions of sexual abuse vary (Browne & Finkelhor, 1986; Gomes-Schwartz, Horowitz, & Cardarelli, 1988; Wolf & Alpert, 1991), most definitions fall along two lines. Interactions which are defined as sexual abuse are:
"1) forced or coerced sexual behavior imposed upon a child, and 2) sexual activity between a child and a much older person, whether or not obvious coercion is involved (much older usually means 5 years age difference)" (Browne & Finkelhor, 1986, p.1). These criteria can be considered guidelines by which objective assessments of sexual abuse can be made, and will be used to operationally define sexual abuse for the purposes of this study.

Risk Factors of Sexual Abuse

Although child sexual abuse can occur under a variety of conditions, research in the field has indicated that factors such as gender, age, family structure, and family dynamics make some children more prone to abuse than others. It is generally agreed that females are sexually abused more often than males, at a rate of approximately four to one (Finkelhor, 1984; Finkelhor, Hotaling, Lewis & Smith, 1990; Gomes-Schwartz, 1988; Russell, 1984; Wolf & Alpert, 1991). With regard to female victims, most studies concur that the onset of sexual abuse occurs before puberty, with the mean age of onset falling between 7 and 10 years of age (Finkelhor, 1984; Finkelhor, et al., 1990; Gomes-Schwartz, 1988; Russell, 1984; Wolf & Alpert, 1991). Most often, victims come from broken homes (Alexander, 1992; Finkelhor et al., 1990; Gomes-Schwartz et al., 1988), with 27% reporting shared residence with a biologically unrelated male (e.g., a stepfather, the mother's boyfriend; Gomes-
Impact of family structure is greater among lower socioeconomic status families led by a single parent (Browning & Boatman, 1977; Finkelhor et al., 1990; Gomes-Schwartz et al., 1988). Gomes-Schwartz et al. (1988) suggest that single parent families that do not have the financial stability to provide consistent child care may resort to shifting the child around to various family members, friends, and babysitters, exposing him/her to more situations where abuse could occur.

Gelinas (1983) cites parentification as a strong correlate of sexual abuse, where often times the victim assumes a parental role in the household (e.g., taking care of younger siblings, doing many of the household chores). Situations in which the mother is physically and/or emotionally unavailable may set the stage for sexual abuse in the intact household. Mothers of victims are typically depressed, passive, emotionally unavailable to both the father and the child, and sexually unavailable for the father (Wolf & Alpert, 1991). Ferenczi (1949) discusses an environment in which maternal unavailability may promote the victim's seeking affection from a father who may express affection only via sexual interaction. The father may misinterpret the child's tender play as sexual behavior, and exploit the child irrespective of the consequences.

Whereas boys are more likely to be victims of sexual abuse by a stranger, girls are more often abused by a
relative or acquaintance (Beitchman, Zucker, Hood, daCosta & Akman, 1991; Faller, 1989; Finkelhor, 1990; Russell, 1984). It is estimated that 80% of female victims are abused by people they know, and 75% to 80% of female incest victims are perpetrated against by a biological father, adoptive father, or step-father (Wolf & Alpert, 1991).

The apparent rarity of perpetration by a mother, or the reporting of such occurrences, is reflected in the lack of information specific to this situation. Wolf and Alpert (1991) suggest that the paucity of these reports may be indicative of society's biased thinking that intrusive contact between a mother and son is not harmful, denying that this type of mother/son bond is sexual. They go on to discuss the few cases in which maternal incest was reported, characterizing the incestuous mothers as more severely impaired, often psychotic or functioning at a severely borderline level, in contrast to most incestuous fathers.

Effects of Sexual Abuse

Comprehensive reviews of more recent literature on the impact of child sexual abuse (Beitchman, et al., 1991; Browne & Finkelhor, 1986) report initial reactions to the trauma which include fear, anxiety, hostility, intense shame and guilt, depression, and anger. Initial effects are defined as those reactions that occur up to two years following the termination of the abuse. Reported long-term effects (i.e., reactions occurring after two years following
the termination of abuse) include depression, self-destructive behavior, anxiety, feelings of isolation and stigma, low self-esteem, difficulty trusting others and engaging in intimate relationships, substance abuse, and sexual maladjustment. Initial and longterm reactions do not differ so much; rather, longterm reactions can be considered extensions of initial symptoms which have become so pervasive that they have been integrated into the personality structure of the victim (Herman et al., 1986; Westen et al., 1990). Among the multitudes of symptoms experienced by victims of sexual abuse, none have been identified as symptoms exclusive to this population (Beitchman, et al., 1992), with most of the symptoms being present in other clinical groups as well. For example, behavioral problems in adolescence such as promiscuity, prostitution, adolescent pregnancy, and self-destructive behaviors (e.g., drug and alcohol abuse) are common among victims of sexual abuse as well borderline personality disordered (BPD) adolescents. The common symptomatology between sexual abuse victims and borderline populations has been documented in current research (Bryer, et al., 1987; Westen, et al., 1990).

Bryer et al. (1987) investigated the rates of childhood abuse in a sample of psychiatric inpatients. The study employed 66 female psychiatric inpatients with an age range of 18-64 years (mean age=31 years). Each subject completed a
questionnaire asking for information regarding family of origin; psychological, social and medical history; and history of sexual and physical abuse. Medical records for the subjects were reviewed, and each was administered a Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983), and the SCL-90-R (Derogatis, 1983) to evaluate the effects of early physical and sexual abuse on later symptomatology. Results indicated that 72% of the subjects reported having been abused, with 21% reporting sexual abuse only, 18% physical abuse only and 33% reporting both types of abuse. All sexual abuse victims were abused before the age of 16. The more severely disturbed patients were more likely to have been victims of sexual abuse. A higher proportion of borderline personality disordered patients was found among the sexual abuse victims than those inpatients without a sexual abuse history (Bryer et al., 1987).

Westen et al. (1990) also suggests that there is a correlation between childhood sexual abuse and later emotional dysfunction. In comparing a group of female adolescents diagnosed with borderline personality disorder (BPD) and a control group for history of physical and sexual abuse, it was found that borderline patients more often have a history of both types of abuse. Whereas a history of physical abuse was similar for both groups, a history of sexual abuse distinguished the groups, with patients in the
BPD group reporting significantly more sexual abuse experiences than those in the control group.

Livingston (1987) compared psychiatric diagnoses of physically abused child inpatients to sexually abused child inpatients. It was found that the sexually abused children were more withdrawn, exhibited a significantly greater number of psychotic symptoms, and were diagnosed with Major Depressive Disorder more frequently than those children with histories of physical abuse.

Factors which have been identified as being associated with persisting negative symptoms of childhood sexual abuse include age of onset of the abuse, the degree of physical violation, the relation of the perpetrator to the victim, and the occurrence of abusive experience over prolonged periods of time.

Literature covering the effect of age of onset of sexual abuse harbors inconsistencies. Whereas some studies have suggested that age of onset of abuse plays no significant role in determining the degree of impact of abuse (Bagley, Ramsey & Finkelhor, 1979; Langmade, 1983; Russell, 1986), others have concluded that it is an important factor in assessing the effects of child sexual abuse (Adams-Tucker, 1982; Cortois, 1979; Meiselman, 1978; Morrow & Sorrell, 1989; Sedney & Brooks, 1984; Wolf & Alpert, 1991). Among these studies, some have found early onset of abuse to have more deleterious effects (Cortois, 1979; Meiselman, 1978;
Morrow & Sorrell, 1989), while others have observed that abuse occurring after puberty is most severe (Beitchman et al., 1992; Sedney & Brooks, 1984). More recent reviews (Brooks, 1985; Cole & Putnam, 1992; Wolf & Alpert, 1991) suggest that repeated abuse occurring early in development or abuse which occurs during or post-puberty is most harmful in terms of resulting major deficits in social functioning and identity formation.

Earlier studies indicated that there was no significant effect of the relationship of the perpetrator to the victim (Finkelhor, 1979; Tsai, Feldman-Summers & Edgar, 1979; Russell 1984). However, Tuft's (1984) concluded that sexual abuse by a step-father is more traumatic than sexual abuse perpetrated by a biological father. Since the earlier wave of research on sexual abuse, abuse by a parental figure has been cited as having significantly negative and prolonged effects in terms of degree of symptomatology (Adams-Tucker, 1982; Beitchman et al., 1992; Brooks, 1985; Browne & Finkelhor, 1986; Cole & Putnam, 1992; Harter et al., 1988; Herman et al., 1986), and social adjustment (Harter et al., 1988).

Type of abuse is another point to consider in assessing the severity of trauma associated with sexual abuse. Browne and Finkelhor (1986) have documented the disagreement of whether penetration is a factor predictive of impairment in the victim. Bagley and Ramsey (1986) have concluded that
vaginal and/or anal penetration is the most decisive factor in outcome. Russell (1984) found that penetration in the form of anal, vaginal and/or oral intercourse was rated by the victim as more traumatic than unwanted fondling of breasts or genitals.

In summary, review of the empirical literature over the last twenty years suggests that abusive sexual experiences appearing to have the most aversive impact are those occurring early in development lasting over long periods of time; those occurring during or post-puberty regardless of duration; and those involving father figures, penetration, and force. Although causality has not been determined, it is likely that these factors are correlated with the degree of severity of the psychiatric symptoms seen among victims of sexual abuse (Westen et al., 1990).

Ego Defense Mechanisms

The concept of ego defense mechanisms has evolved from Freud's (1894) initial view that they are maladaptive ways of buffering oneself from anxiety and painful affect associated with instinctual drives to the current view that defense mechanisms are potentially adaptive or maladaptive (Cramer, 1991; Fenichel, 1937; Vaillant, 1971). As adaptive mechanisms they are much akin to coping styles (Anthony, 1987); however, to the degree that they are rigidly employed, overrelied upon, and used to impede realistic conflict resolution (e.g., avoiding conflict by distorting

The notion of defense mechanisms was proposed by Sigmund Freud (1894) based on his observations of neurotic individuals in psychoanalysis. From these observations he generated theoretical models to account for the dynamic nature of the psyche. One tenet of Freud's dynamic concept of the psyche is that the use of defense mechanisms is necessary for survival of the organism. Defenses are believed to operate in the realm of the unconscious which consists of facets of one's behavior of which he or she is unaware (Freud, 1915). Once brought into awareness the nature of the defense changes.

Freud's structural model (1923) posits that an infant is born with innate drives which are sexual and aggressive in nature. He referred to this basic state of the psyche as the id. The infant is only capable of needing, being gratified by its mother (primary caregiver) in the form of being fed, held, and nurtured. The infant experiences this gratification as pleasure, and is unable to achieve this sense of pleasure in absence of the mother. Freud (1911b) referred to the instinctual striving to attain this gratified state as the "pleasure principle" (p. 219). The frustration inherent in the situation in which the infant's
needs are not immediately met results in anxiety. The anxiety generated by this arousal is an unbearable overload of stimulus for the infant, thus, necessitating self-gratification. Defense mechanisms are the means utilized to buffer the self from anxiety, thereby reconstituting the equilibrium of a pleasureable state. Ego functions gradually develop as the infant matures, eventuating in memory, judgement, reality testing, creativity, and cognition. The ego develops as mediator between the id and external reality, making primary the function of defense. After the child has internalized the standards imposed by the parents, the ego must also function to gratify the pleasure-striving id within the parameters sanctioned by these standards. The internalized social order is referred to as superego.

The energy, generated by the instincts, which drives the system is referred to as libido. As the ego matures, the energy is redirected from the original strivings into productive functions of the ego. Libido is limited and must be adequately distributed so as to be available to all ego functions as needed. Ideally, as ego matures, the defense structure will have become advanced enough to allow for gratification within the constraints of external reality and without overexpenditure of libido. However, under situations of stress, more energy is allocated to defense function at the expense of adequacy of other functions (Freud, 1923).
Freud (1905) proposed a chronology for the establishment of defenses, the psychosexual stages. These stages are marked by the investment of libido in areas of the body from which the developing individual receives the most gratification. The first psychosexual stage is the oral stage, during which the infant receives the most pleasure from feeding, sucking, and biting. At this point, the infant is incapable of feeding itself, and depends wholly on another individual for sustenance. The frustration and anxiety which occurs as the infant senses the absence of the mother is overwhelming, thus mandating the infant's self-gratification. The defense elicited by the infant's experience of external reality is denial (i.e., in fantasy, the infant denies the mother's absence and believes that she is actually there). At this stage of development, reality testing is not mature, and the defense of denial has adaptive value.

As the infant begins to differentiate between self and other, it experiences frustration and aggression as "not me," and the pleasure of gratification as "me." The distinction between the mother and self is not complete, and the mother is experienced by the infant as good when gratifying and bad when frustrating. The infant, developmentally unable to integrate positive and negative affect, experiences self and mother as either all good or all bad. When the infant's affect is all bad it becomes "not
me," thus placing the unpleasureable affect outside itself. This defense is referred to as splitting.

These defenses begin to lose value as the infant becomes increasingly aware that the mother is a separate entity. This is probably the first hint of reality testing. Projection, also considered an immature defense, arises when the infant has some awareness that he or she and the mother are indeed separate individuals. More advanced than splitting or denial, projection is a means of placing impalatable wishes or affect upon another object. For example, in the instance the infant feels aggression toward the mother, he or she might perceive the mother is angry at him or her.

At approximately 12 months of age, the infant enters the anal stage of psychosexual development. Although defenses from the previous stage remain viable, the infant continues to develop new means of coping with internal and external reality. The task of toilet training is of utmost importance at this stage, and the child’s gratification and frustration, both in terms of reinforcement from the parents and physical pleasure from the retention and release of feces, revolves around the anal sphincter. The anal stage also emphasizes the distinction between inner and outer, taking in and expulsion, and projection remains a viable defense in this stage. Denial and splitting become gradually less useful as the capacity for reality testing further
develops. During the anal stage, the child develops a means of handling aggression which is acceptable to the parents. It is at this stage that the standards of the parents begin to be internalized to form the rudiments of the superego. If parental demands are overly harsh or critical, the child's internalized representations of the parent's expectations will also be harsh and critical. Now the child's ego must buffer the self from these rudiments of his or her own superego.

The third psychosexual stage is the phallic stage during which the primary erogenous zone is the genitals. During this stage, the child's greatest undertaking is that of identification with the same-sex parent. During the phallic stage, which occurs from approximately ages two through five years, the child realizes his or her gender. The defenses erected to buffer the child from anxiety emerging at this stage are repression (i.e., the forgetting of the threatening situation), and identification with the aggressor. Under normal conditions, positive identification with the same-sex parent occurs. Through this process the superego is formed.

Following the phallic stage, the child's psychic structure is thought to be well intact, and he or she enters latency. Originally considered to be neutral a stage of assimilation and integration of previously attained proficiencies, current research and theory suggests that
this is an active phase throughout which the development of defenses continues (Blum, 1985; Chess & Thomas, 1976; Cramer, 1991; Freud, A., 1966; Kernberg, 1975; Vaillant, 1971; Weintraub, 1989).

Stemming from Freud's contributions, ego psychology emerged focusing primarily on ego development and the mechanisms of defense. Based on observations of child behavior, Anna Freud (1936/1966) proposed ten ego defense mechanisms including regression, repression, reaction formation, isolation, undoing, projection, turning against the self, reversal, and sublimation. Since the contributions of Anna Freud, theory and research regarding the development and use of defense mechanisms has remained central in the dynamic conception of human development, interaction, and psychopathology. In contrast to classical drive psychology which emphasizes the interaction of intrapsychic structures in dealing with instincts and drives, the focus of ego psychology is upon the development of ego as a function of the interaction of intrapsychic processes in an interpersonal context, particularly the mother-child dyad.

'Mother' in this context refers to a person assuming the role of primary caretaker of the infant/child, irrespective of biological relationship or gender.

The mother, an internalized object as well as a real external force, serves as protection to the infant. In conjunction with genetic predisposition, the environment
which the mother creates (i.e., the degree to which she protects the infant from aversive conditions), and the degree to which she indulges and frustrates the infant, are considered foremost determinants in the development of ego (Khan, 1963; Mahler, 1966; Winnicott, 1960). Defense mechanisms develop as means of dealing with frustrations posed by lapses in the mother's provision as protector and gratifier. Thus, for ego functions (e.g., defense mechanisms, cognition, judgement) to mature, some degree of frustration is necessary. If the mother provides a perfect environment, performing all functions for the infant, the infant is not compelled to mature, and would remain completely dependent upon and undifferentiated from the mother. In the other extreme, if the mother constantly fails to provide for the infant, the infant prematurely provides for the self. When there is no insulation provided to limit the degree to which reality impinges upon the child's experience, precocious development of specific ego functions, including defenses, may result (Spitz, 1961). This premature investment of energy in defenses taps energy which is vital for the development of other necessary ego functions, resulting in uneven ego development, which is detrimental to the overall growth of the individual (Anthony, 1987; Brooks, 1985; Horner, 1983; Khan, 1983; McDevitt, 1979; Schaer, 1991; Shengold, 1989; Winnicott, 1960). The optimal environment for ego development is one
in which the mother provides for and buffers the infant consistently enough to meet the infant's needs, yet allows for enough frustration to sustain maturation (Khan, 1963; Mahler, 1966; Winnicott, 1960). With continued development, the nature of the mother-child relationship changes. While a dependent relationship with the mother is thought to persist throughout life, it becomes a relative dependency, rather than an absolute necessity for survival. Optimally, the mother continues to serve as a stimulus barrier and provider, although to a lesser degree, through adolescence (Khan, 1963).

Defense mechanisms which allow the developing child to tolerate the gradual separation and individuation from the mother are adaptive, while those that hinder the process are considered pathological (Anthony, 1987; Van der Leeuw, 1971). It is in this way that defenses are viewed as either indispensable buffers which promote development, or mechanisms rigidly employed which inhibit further psychological maturation throughout life. In considering this dual nature of defenses it becomes necessary to discern psychopathology in terms of the degree to which one relies upon a given defense, and the appropriateness of using a defense at a given age (Blum, 1985; Cramer, 1991; Freud, A., 1966; Lichtenberg & Slap, 1971; Vaillant, 1971; Van der Leeuw, 1971). The distinction of primitive (i.e., infantile, distortion of reality as a means of alleviating anxiety)
versus mature (i.e., means which do not significantly distort reality) defenses is useful in this regard.

Primitive defenses, including denial, splitting, projective identification, primitive idealization, devaluation, omnipotence, turning against the self, reversal into its opposite, and projection (Battista, 1982; Freud, S. 1915; Kernberg, 1967, 1970; Klein, 1946; Mahler & McDevitt, 1968; Schafer, 1968; Vaillant, 1971) are thought to operate normally in children prior to the Oedipal phase.

In the instance of developmental arrest, the growth of the individual's ego defense structure has been retarded, thus, mature defenses, if used at all, are not used as effectively as one would expect relative to age (Willick, 1985). Frequent and rigid use of primitive defenses in adulthood may suggest pathology and possible trauma at an earlier stage of development (Blum, 1985; Freud, S. 1924; Kernberg, 1967, 1970; Sandler & Joffe, 1967; Willick, 1985). Use of these defenses is characteristic of psychotic and borderline adults (Freud, 1937; Kernberg, 1967, 1970; Willick, 1985).

The frequent use of less mature defenses after one has developed mature defenses suggests the occurrence of regression. Lichtenberg and Slap (1971) cite Schur (1958) in reference to a current situation triggering an early childhood reaction:
...where intrapsychic conflict is strong and/or ego functioning depleted, primary-process thinking and relatively automatic stereotypic alarm responses occur. A temporary stress may then be misinterpreted as identical to a past danger situation. Once this connexion is made, associative links are established to the memory of prior unresolved conflicts and fixation points (p.55).

It is suggested that mature defenses do not replace the less mature and primitive defenses but inhibit the use of them, overlapping them in terms of a hierarchy of preferred use (Blum, 1985; Freud, A., 1966; Sandler & Joffe, 1967). In the case of regression, mature defenses are thought to recede, disinhibiting the use of less mature and/or primitive defenses.

Two different approaches to the characterization of defenses have been offered. The first is the developmental approach which uses time as a point of reference. For some who place defense development in a chronological time frame, the defenses reflect progression through well-defined developmental sequences (Freud, A., 1966; Freud, S., 1926; Stolorow & Lachmann, 1977). For others using this approach, defenses are characterized in terms of more flexible time-related dimensions. For example, particular defenses are conceptualized as mature versus immature, or primitive (Willick, 1985). The second approach orders defenses
hierarchically according to some salient feature of the defense other than chronological time. In this model, individuals of the same age may use defenses from any level of the hierarchy. It is possible, however, that such a model be consistent with a developmental approach. Empirical support for the hierarchical development of defenses has been demonstrated (Battista, 1981; Cramer, 1987; Vaillant, 1971; Weintraub & Plaut, 1989).

A developmental dimension is apparent in Vaillant’s (1971) proposed heirarchy categorizes defenses into four levels of maturity: ranging from the most primitive narcissistic defenses (e.g., denial, distortion), to immature (e.g., projection), neurotic (e.g., reaction formation, repression), and mature defenses (e.g., suppression, sublimation). This defense hierarchy was developed from a 25 year follow-up study of 30 males who were selected for psychological and physical health during their sophomore year in college (Vaillant, 1971). On an average of once every two years, a follow-up interview and questionnaire were administered to each subject. Vaillant proposed that the defensive style exhibited by subjects would reflect their degree of life adjustment. A life adjustment score was derived by an overall soundness rating combined with ratings of the subject’s occupational and domestic success, and health over the course of the study. Life adjustment ratings divided the subjects into three
groups, "fair," "good," and "best." Defense level scores were derived by quantifying subjects' preferred defensive styles during the interviews based on the levels proposed by Vaillant (1971). Results suggested that all subjects frequently used the neurotic defenses (level III); however, the "best" group used significantly more mature defenses (level IV) and less immature defenses (level II) than the "fair" group. The frequency of narcissistic (level I) defenses was so rare in this sample that it was not included in the analysis. Vaillant (1971) suggested that shifts in defense styles throughout one's lifetime are correlated with degree of adaptive value and consequences of the given defense style, psychobiological maturation, and reduction of psychological disturbance.

Support for the hierarchical developmental model of defenses has also been demonstrated in an adult clinical sample (Battista, 1981). By correlating scores on his Ego Function Inventory with scores on the Global Assessment Scale (Endicott, Spitzer, & Fleiss, 1976), Battista found a hierarchy quite similar to that reported by Vaillant (1971).

Cramer (1991) has also demonstrated a hierarchical model of defense development spanning preschool years through late adolescence. She developed a defense rating scale, the Defense Mechanism Manual (DMM), for the Thematic Apperception Test (TAT; Murray, 1943) to determine which defenses her subjects were utilizing in their TAT stories.
She found that denial was the most commonly used defense with preschool aged children and tapered off rather quickly thereafter. Projection was the defense preferred by the grade school and early adolescence groups, declining gradually in late adolescence. Identification was used mainly by the adolescent groups, and minimally by the preschool group. These findings provide empirical support for the defense hierarchy in children (Cramer, 1987).

The purpose of this study is to extend Cramer's hierarchical model of defenses to a clinical sample of sexually abused children in an effort to understand how sexual abuse impacts ego functioning, specifically, defense usage. By detailing each of the three defenses specified in Cramer's model one can understand the role each plays as an ego defense mechanism as well as how each facilitates normal development.

**Denial**

Denial is a defense against anxiety generated by the external world. Whole objects in the individual's representational world are altered to alleviate the anxiety brought about by painful affect (Freud, A., 1966).

Denial is not only normal, but necessary in buffering the vulnerable ego of the infant who perceives his mother's absence. Denial first manifests itself in the developmental inability to register the reality of the situation. The perceptual structures which would allow the infant to sense
an event have not sufficiently matured. However, once the infant is physically developed enough to detect and integrate sensory input, denial is considered to be a defense mechanism. The infant first denies reality by closing his eyes. Simply by not seeing what is threatening to the ego, anxiety is reduced. After the infant becomes more coordinated, he can roll his head from side to side, and is capable of looking the other way. In this way reality is either misperceived or omitted altogether (Cramer, 1991; Spitz, 1961).

The defense of denial is incompatible with reality testing. For young children the capacity for reality testing is not so important that denial by fantasy would be detrimental to the child's functioning. Over the course of development, the capacity for reality testing is realized in the need for synthesis and understanding. Thus, after the earliest stages of childhood, the defense of denial loses its adaptive value (Freud, A., 1966). In adulthood, the frequent use of denial severely compromises reality testing (Freud, A., 1966).

**Projection**

During the course of development the infant employs projection in conjunction with introjection, a primitive form of identification, to help delineate between the self and other (Cramer, 1991; Meissner, 1980). Physiological precursors to projection are the spitting out of food that
tastes bad to the infant, and the elimination of wastes to rid the self of an uncomfortable sensation (Stolorow & Lachmann, 1977). Cognitive developmental prerequisites to projection include differentiation between inner and outer, awareness of acceptable versus unacceptable (as dictated by parental standards), and differentiation between conscious and unconscious mental representations (Cramer, 1991).

After minimal awareness of differentiation from the mother has occurred, the infant will retain the good parts of the self and other, maximizing positive affect, and place the painful aspects outside himself onto another object (Cramer, 1991; Freud, S. 1911; Meissner, 1980). This process operates to regulate the individual's interactions with external objects to varying degrees throughout life (Meissner, 1980).

After a certain degree of self-definition has occurred, projection is normally replaced or inhibited by a more mature means of relating to others. The frequent use of projection beyond this point in development constitutes a defensive, age-inappropriate reliance upon this mechanism. It no longer facilitates relationships, but rather distorts and confuses interactions, compromising some degree of reality testing. It is not the content of the reality which is compromised, but rather the significance of what it represents (Meissner, 1980; Sandler, 1987). Projection manifests itself in multiple forms (Cramer, 1991; Meissner,
1980) including seeing the self and object as thinking alike, and altering or misinterpreting an event (e.g., "an explanation"). The extreme misuse of projection is evident in paranoid states and schizophrenia (Freud, S., 1911; Willick, 1985).

Identification

There are multiple definitions of identification (Compton, 1985, Cramer, 1991). This is attributable, not only to the necessary delineation between its function as an ego defense mechanism and a developmental process (Compton, 1985; Freud, A., 1966; Horner, 1983), but also to the many roles it plays within the developmental framework in both formation of ego (primary identification) and superego (secondary identification). Without identification as a developmental process, integration of ego functions does not occur, and they remain disjointed as "partial functions" (Hendrick, 1943, p. 46).

The feature common to the different types of identification is that an individual unconsciously changes aspects of the self to become like another person or group. The functions of identification are to maintain effective relationships with significant others and to develop and maintain self-esteem. In contrast, defensive identification used to avoid anxiety and maintain self-esteem, results in only temporary changes (Compton, 1985; Hendrick, 1943; Sandler, 1987).
Within the rubric of modes of defensive identification there lay a developmental continuum as well. The earliest, most primitive form of identification is incorporation, the internalization of whole objects. This prototype of identification (Freud, S., 1905; Sandler, 1987), occurring outside the undifferentiated state in early infancy, indicates severe regressive states commonly found in the psychoses. Incorporation is the fulfillment of drive-based wishful states of being fused with the object, and thus operates from a very primitive ego (Compton, 1985; Freud, S., 1933).

Introjection, another immature form of identification, involves the internalization of part objects rather than whole objects. At this point, differentiation between self and other has begun; however, the internalized aspects of the other are unadulterated (Compton, 1985), remaining in a form which is representative of the other rather than of the self. What results is a type of emulation of the object.

Identification, the most mature form of identification, involves changing aspects of the self to be like the other, yet, changing in such a way that fits within the self-repertoire. Thus, one is still being influenced by the other, optimally in positive ways, without losing self-identity. This more mature form of identification is thought to occur throughout adulthood (Compton, 1985; Cramer, 1991; Moses, 1984; Sandler, 1987) but to a lesser degree than it
occurs in adolescence, when it is most pronounced (Cramer, 1991; Freud, A. 1966). Identification is considered to be a preliminary to mature object love (Freud, A., 1966), is the basis for object constancy.

Adult use of early forms of identification (e.g., introjection) is a defense against the anxiety of object loss (Compton, 1985; Freud, S., 1917; Sandler, 1987), suggesting regression from love of a real person to love of an internal representation (Compton, 1985), that is moving from a real relationship to an "...unconscious internal 'phantom' companion, felt to be part of one's inner world, yet external to one's self-representation..." (Sandler, 1987, p.11). This type of identification, used in adulthood, is common in depressive and narcissistic states (Compton, 1985; Freud, S., 1917; Horner, 1983).

Identification with the aggressor remains a viable defense throughout adulthood. Initially involved in formation of the superego, it becomes a means of diminishing anxiety associated with external threat (i.e., the threatened individual comes to perceive the self as threatening), and dealing with authority figures (Freud, A., 1966; Moses, 1984; Sandler, 1987). This in-and-of-itself is adaptive. However, it is problematic when it is carried over into adult love relationships. As an admixture of introjection and projection, identification with the
aggressor results in jealousy and paranoia in these relationships (Freud, A., 1966).

**Sexual Abuse and Ego Functioning**

The theory of ego development in the context of the interplay between intrapsychic processes and interpersonal experiences helps one envisage how trauma can impinge upon ego. Trauma embodies any event which results in psychological overstimulation. Much of the energy that would normally propel essential ego functions (e.g., memory, judgement, cognition) is redirected to the function of defense. Although the compromise is costly, the energy spent to drive defenses is necessary to buffer the self from disintegration. It is in the instance when one is threatened by such primitive fears that primitive defenses are necessary (Horner, 1975; Kernberg, 1970; Willick, 1985).

Clinicians who are experienced in working with victims of sexual abuse report evidence of psychological overstimulation in their clients (Brooks, 1985; Cole & Putnam, 1992; Shengold 1989). Shengold (1989) elaborates on how victims experience alternating repetitive overstimulation and emotional deprivation. He suggests that when adult sexuality is imposed upon an immature psyche and body fused sexual and aggressive feelings are evoked, culminating in a rage which is too much for the child to bear. The child depends upon an abusing parent and/or a parent who is too weak or absent to protect him or her from
the perpetration. The child must then not only tolerate the
abuse, but also his or her own rage at the mother for
failing to provide a safe environment.

Therapists who have written about their observations
stress how the child struggles to maintain the image of the
"good mother" on whom he or she must depend. Massive primitive
defense such as denial and splitting (e.g., reversal,
turning "good" into "bad") are employed to maintain the
fallacy of the "good mother," at the expense of maintaining
a positive self representation. By identifying with the
aggressor, the child experiences the self as bad, harboring
the guilt that the negligent and/or abusive parent should
have felt. Thus, victims of this type of trauma have a
harsh and poorly integrated superego, which often manifests
itself in a strong unconscious need for punishment (Brooks,

Shengold (1989) discusses the outcome of such trauma as
being partially dependent upon the constitution of the
child, proposing that some children possess "inherited gifts
and ego strength" (p. 6) which others do not. This
phenomenon is not a new concept in general trauma theory.
Anthony (1987) discusses the notions of risk, vulnerability
and resilience in relation to physiological hardiness, and
social support in evaluating the outcome of trauma, in
general. Anthony describes the resulting defects in
personality of vulnerable individuals following exposure to
trauma as a general restriction of ego and withdrawal from the external world. He describes a specific facet of impaired ego development, the rigid adherence to a brittle defense system which, due to its basis in denial, leaves the individual prone to disintegration. This has been a frequently reported observation with victims of sexual abuse. Heavy reliance upon primitive defenses that partially defend against the experience and discharge of affect, results in rigid emotional control followed by intense outbursts. While many victims are able to function in an "as if" (Shengold, 1989, p.25) facade of normality, others become intermittently psychotic or antisocial/criminal types.

Defense mechanisms most often identified in the literature regarding victims of sexual abuse include denial, splitting, and dissociation (Brooks, 1985; Cole & Putnam, 1991; Shapiro & Dominiak, 1990; Shengold, 1989; Wolf & Alpert, 1991). Wolf and Alpert (1991) also identified repetition compulsion as a common defense reported in case studies of victims.

Literature reporting a higher rate of sexual abuse history among psychiatric populations lends support to the idea that child sexual abuse correlates with the development of psychological disorders, (Bryer, et al., 1987; Livingston, 1986; Westen, et al., 1990). These findings are not altogether surprising in light of literature which
relates lower levels of character development to the over-utilization of primitive defense mechanisms. Conditions which frequently warrant psychological intervention are associated with the use of such primitive defenses as denial, splitting, and projective identification (Kernberg, 1969).

**Measurement of the Impact of Trauma**

Zivney, Nash and Hulsey (1988) examined differences between girls sexually abused before the age of nine and those who were abused after the age of nine. Duration of abuse was the only factor in which the two groups differed significantly, with the early abuse group (EA) reporting longer duration than the late abuse (LA) group. Rorschach variables indicative of cognition, self-image, degree of anxiety/helplessness, body concern, and development were compared for the EA, LA and control groups. It was found that subjects who were abused at earlier ages and for longer periods of time were more likely to give responses suggestive of disturbed cognition and damaged self, with themes of intense need. Their responses were more characteristic of that of disturbed child patients.

Pistole and Ornduff (1993), using the Scoring Scheme for the TAT and Other Verbal Projective Techniques (Fine, 1955), compared the manifest content regarding affects and outcome of TAT stories between a clinical sample of sexually abused female children and a nonabuse comparison sample. While
finding no overall differences regarding negative outcome or negative affect, there was significantly more content surrounding guilt and sexual preoccupation specifically, in the sexual abuse group. This finding is consistent with literature reporting precocious sexual behavior and guilt as common symptoms among sexual abuse victims (Alter-Reid, Gibbs, Lachenmeyer, Sigal & Massoth, 1986; Beitchman, et al., 1991).

Shapiro, Leifer, Martome and Kassem (1990) measured depression in sexually abused girls using the Children's Depression Inventory (Kovacs & Beck, 1977), the Internalization Scale of the Child Behavior Checklist (Achenbach & Edelbrock, 1983), and the Rorschach Depression Index (Exner, 1986). Little correlation between results on the face valid objective measures and the projective measures was observed. Self-report measures of distress yielded low scores, whereas clinical observation and scores on the Rorschach Depression Index yielded high scores. This discrepancy was explained in terms of a response style characterized by guardedness or defensiveness on the objective measures, rather than as low level of distress among the victims. The authors explain how projective measures are particularly helpful in assessing victims of abuse for this reason.

Dollinger and Cramer (1990) reported similar findings in a study examining children's defensive responses and
emotional upset after they had witnessed a peer having been struck by lightning. Using the DMM to assess the use of defense mechanisms in subjects' TAT productions, they found that the children using age-appropriate projection and those using greater total number of defenses reported less emotional upset than those who had low defense scores. By comparing self-report and parents' reports, Cramer found that subjects with lower defense scores had more agreement with their parents' reports, whereas those with high defense scores had less agreement. Cramer interpreted these findings as suggesting that high use of defense may interfere with a person's ability to make a reliable self-report. Since defense mechanisms are dynamic unconscious processes, self-report measures (e.g. checklists) are inadequate in assessing the types of and degree to which specific defenses are used.

Projective tests were designed to assist clinicians in assessing an individual's unconscious processes (e.g. drives, needs, defenses). Murray devised the Thematic Apperception Test (TAT; Murray, 1943) based on the assumption that people will interpret an ambiguous stimulus in terms of their past experiences, expectations, and affective states. It is hypothesized that a person makes sense of the world by projecting onto it his or her own inner world (Frank, 1939). It is further hypothesized that when individuals project their inner world onto an ambiguous
stimulus, they are unaware that they have disclosed anything about themselves. Frank suggested that much information is lost when questions and answers are supplied by the examiner, and advocated a means of testing which would retain an individual's unique way of perceiving and interpreting reality.

Murray (1943) suggested that one often cannot say what is most important about oneself in assisting others' understanding of him or her. Thus, the storytelling task put forth in the TAT takes the person "off guard" because of its novelty and the plasticity of the scenes depicted, such that affect-laden material may be revealed without eliciting awareness of excessive anxiety in the individual. This buffering is a result of the defensive process. Projective tests elicit defenses because of their anxiety-provoking nature (Frank, 1939; Murray, 1943).

Traditionally, the concept of defense has been reserved for clinical use in reference to an individual undergoing psychotherapy; however, in an effort to quantify intrapsychic phenomena and work toward validating psychodynamic theory, researchers have developed instruments to measure defenses. To this end, projective measures are frequently used. Although their validity is in question, one must realize that the dynamic nature of intrapsychic processes makes them difficult to empirically demonstrate (Blatt, 1975; Cramer, 1991; Schafer, 1968). Blatt (1975)
suggested that research regarding projective techniques is biased by the researchers' negativity about the validity of the techniques, and because of the lack of clinical acumen of the researchers interpreting projective data.

This provides a rationale for contemporary researchers' continued use of projective measures such as the Rorschach Inkblot Test (Rorschach, 1921/1942) and TAT often in conjunction with objective means of analyzing them [e.g. Cramer's Defense Mechanism Manual (Cramer, 1991), Exner's (1986) Comprehensive system for the Rorschach (Exner, 1976), Westen et al. (1985) Object Relations and Social Cognitions TAT scoring system (Westen et al., 1985)]. In this way, researchers can retain the information unique to an individual which is gained in projective assessment while also making quantitative sense of it for comparison to population norms and for research purposes (Blatt, 1975; Cramer, 1991; Exner, 1986; Weintraub & Aronson, 1967; Westen et al., 1985).

The TAT consists of 30 ambiguous achromatic pictures containing a varying cast of characters and settings, and one blank card. The examiner asks the individual to tell a story about each individual picture (in a predetermined subset of the 31 cards), including what led up to the scene in the picture, what the outcome will be, and what the characters are thinking and feeling.
In a study utilizing the Defense Mechanism Manual (DMM), Cramer & Gaul (1988) assessed the effects of moderate stress on the use of defense mechanisms in second- and sixth-grade school children. The experimenters induced stress in half the subjects in each age group by manipulating the subject's perception of success or failure of his or her performances on a stressful task. Before and after the experimental manipulation, subjects were administered the TAT. Prestress and poststress stories were rated with the DMM. Prestress rating analysis revealed no significant differences in each age group. Sixth graders used significantly more identification and less denial than second graders. Second graders used more denial and projection than identification. These findings support the developmental defense hierarchy reported in Cramer's initial study (1987). Analysis of the poststress ratings showed a main effect of the stress condition. The failure group showed significantly higher total defense usage, using significantly more denial and less identification than the success group. Within the second grade group, those under the failure condition used significantly more projection than had been observed prestress. The sixth grade success group used significantly less projection after perceiving they had done well on the task as compared to prestress conditions. Cramer suggests that these findings support the concept of regression, that is, under conditions of stress individuals use defenses
which are less mature than the level at which they typically function.

Given the empirical work of Cramer documenting the validity and reliability of the Defense Mechanism Manual (DMM; Cramer, 1991) for rating the frequencies of denial, projection, and identification in TAT stories, one might consider the DMM to be an appropriate measure, sensitive enough detect differences in defense usage between victims of sexual abuse and clinical controls with no history of sexual abuse while taking into account the factor of age.

**Purpose and Significance of the Study**

The purpose of the present study was to compare the use of defenses among sexually abused females to that of females with no history of sexual abuse. Specific hypotheses were as follows: 1) the sexual abuse group would use significantly higher frequencies of denial in their TAT productions as measured by the DMM (Cramer, 1991) than the nonabuse group. Thus, it was expected that the effect of denial would not covary with age in the sexual abuse group, but would in the nonabuse group.

2) Subjects in the sexual abuse group would use significantly lower frequencies of identification than the nonabuse group. Thus, it was expected that identification would not covary with age in the sexual abuse group, but would in the nonabuse group.
3) It was expected that the sexual abuse group would have significantly higher frequencies of Total Defense use (the sum of the three individual defense scales) than the nonabuse group.

4) Total Defense was expected to increase with age for both groups.

5) The plotting of mean relative defense usage, comparing denial, projection and identification for both groups, was expected to reveal significantly different defense development patterns between groups. It was expected that the nonabuse group would exhibit a profile similar to that found in Cramer’s (1987) normative sample.
CHAPTER II

METHOD

Subjects.

Subjects were 29 sexually abused female children and 28 female children with no documented history of abuse ranging from 6 years to 16 years of age evaluated at Dallas Child Guidance Clinic (DCGC). In this investigation, sexual abuse was defined as a wanted or unwanted sexual experience with an individual at least 5 years older, including contact and noncontact events. The determination of sexual abuse was made from documentation of abuse recorded in each subject's case file. Nonabused subjects were referred for evaluation and/or treatment of various behavioral problems (47%), emotional problems such as dysthymia (27%) and phobias (3%), and academic problems including Attention Deficit Hyperactivity Disorder (ADHD) and learning disabilities (23%). Subjects whose records were incomplete or contained evidence of psychosis or I.Q. below 70 were excluded from this investigation.

Characteristics of Sexual Abuse Group.

Frequency of abuse was defined as the number of incidents of abuse and was recorded as either an "isolated" event (17%), having occurred only one time, or "ongoing"
(76%; the remaining 7% of the cases had insufficient information to make this determination). The mean age of onset for the victims was 8 years, 9 months (S.D. = 3 years, 5 months), and the average duration of abuse in ongoing cases was 3 years, 2 months (S.D. = 2 years, 2 months). Eighty-six percent of the abuse cases in this study involved some form of genital contact. Perpetrator role was defined as "parental" versus "non-parental." Seventy-six percent of the abuse was perpetrated by a parental figure, including a biological parent (45%). Step-parents (31%), and cohabitants (3%) Eighty-six percent of the abuse occurred in the home, with 53% being perpetrated by a family member. The majority of the perpetrators were male (97%), with one subject having been perpetrated by both a male and a female.

Measures

Data utilized in this study were archival in nature, and included psychological reports, social histories, Wechsler IQ scores and TATs. As a part of routine clinical assessment, each subject had been administered the Wechsler Intelligence Scale for Children-Revised (WISC-R; Wechsler, 1974) and the Thematic Apperception Test (TAT; Murray, 1943). All testing was administered at DCGC by clinical staff having completed at least a master's degree in psychology with formal coursework in psychological testing, and was supervised by a licensed clinical psychologist.
Defense usage was assessed using the Defense Mechanism Manual (DMM; Cramer, 1987). The DMM is a system by which the use of denial, projection, and identification are assessed by responses to the TAT. For each defense, there are seven categories which may be scored, each representing a different form of the defense. The frequency of use of each category determines the three defense scores for that story. The scores are then summed across cards to determine an overall score for each defense. In addition, Total Defense (the sum of the three individual defenses) is calculated for each subject (For a detailed description of the procedure see Cramer, 1991).

The psychometric properties of this scoring procedure are detailed by Cramer (1991), and provide good support for reliability and validity of the defense measures. The test developer reports the following corrected split-half reliability coefficients for a sample of nondistressed college students: Denial, ρ = .71; Projection ρ = .68; Identification, ρ = .70; and Total Defense, ρ = .84. Internal consistency reliabilities for this same group range from .63 to .76. Median interrater reliability coefficients for three raters trained in the use of the scoring system are reported as .87, .81, and .80 for Denial; .82, .81, and .78 for Projection; and .64, .67, and .59 for Identification.
Validity studies show good criterion-related validity, with defense ratings from individual TAT stories correlating significantly with both self- and parent-reports of psychopathology (Dollinger & Cramer, 1990). The DMM has also been shown to be sensitive to change in psychological status and interpersonal functioning following intensive, long-term treatment among psychiatric inpatients (Cramer & Blatt, 1990). Adequate construct validity has also been demonstrated in investigations of age differences in defense use (Cramer, 1987; Cramer & Gaul, 1988), and changes in defense use as a function of experimental manipulation (Cramer & Gaul, 1988).

Procedure

Names were removed from all data to insure confidentiality. To provide homogeneity among subjects' data, each subject was rated on the same four TAT cards: 1, 2, 3BM, and 4. TAT records were photocopied, transcribed, and divided into individual stories for purposes of separate scoring. Two doctoral students in clinical psychology who trained extensively using detailed scoring manuals coded the stories. Stories were provided to the raters on separate pages in random order, so that the rating of multiple stories from the same protocol was entirely independent. Raters were blind as to the group status of each subject. Interrater reliability coefficients obtained between raters using Pearson Product Moment correlation with the Spearman-
Brown correction for multiple coders were: Denial, $r = .82$; Projection, $r = .80$; Identification, $r = .80$; and Total Defense, $r = .87$. 
CHAPTER III

RESULTS

Preliminary Analyses

Interrater reliabilities were computed using Pearson Product Moment correlation coefficients with the Spearman-Brown correction formula for multiple coders. Corrected reliabilities were as follows: Denial, $r = .77$, Projection, $r = .58$, Identification, $r = .88$, and Total Defense, $r = .77$.

Tests for normality were performed for the following dependent variables: Denial, Projection, Identification and Total Defense. Results indicated that the samples were positively skewed with regard to Denial, Projection and Total Defense. While the assumption of multivariate normality underlies Multivariate Analysis of Variance (MANOVA), current thinking suggests that MANOVA is robust with regard to violation of this assumption (Bray & Maxwell, 1991); therefore, multivariate procedures were used to test formal hypotheses. This analysis also identified three cases as outliers (one from the sexual abuse group and two from the non-abuse group) which were eliminated from further analyses, leaving 29 subjects in the abuse group and 28 subjects in the nonabuse group.
Preliminary analyses were performed between the sexual abuse and nonabuse groups on the following dependent variables: age, $t(55) = .73$, $p>.05$, two-tailed; family structure, $t(55) = -.22$, $p>.05$, two-tailed; Full Scale IQ $t(43) = -.63$, $p>.05$, two-tailed; Verbal IQ $t(43) = -.52$, $p>.05$, two-tailed; Performance IQ $t(43) = -.77$, $p>.05$, two-tailed; race, $X^2 = 3.36$, $p>.05$. Results of these analyses indicate that the groups did not differ significantly with respect to any of these variables.

Analysis of Hypotheses

To examine the relationship between age and defense use, Pearson correlations were computed between Denial, Projection, Identification, Total Defense, and age. Results showed significant inverse relationships between Denial, $r = -.54$, $p < .001$, one-tailed; Projection $r = -.22$, $p<.05$, one-tailed; and Total Defense $r = -.26$, $p<.05$, one-tailed, and age. Identification was not significantly related with age, $r=.15$, $p>.05$, one-tailed. Intercorrelations between the individual defenses were not significant. Given the aforementioned correlations between age and the measures of defense among the three scales, a Multivariate Analysis of Covariance (MANCOVA) was utilized to analyze results. Mean defense scores were calculated by averaging the scores between raters and across cards for each subject (see Table 1). To test the hypotheses regarding differential defense use between groups, a MANCOVA was performed on the
independent variable group (abuse versus non-abuse) across mean scores for the following dependent variables: Denial, Projection, and Identification. Age was included as a covariate. Results showed a significant main effect, with Wilks Lambda = .617, $F(3,52)= 10.75, p<.001$. Univariate F-tests were performed to assess which defenses contributed to group differences. Results indicated that the group effects were significant with regard to use of Denial, $F(1,54)= 22.73, p<.001$, with the sexual abuse group using significantly more denial (adj. mean= 5.65) than the non-abuse group (adj. mean= 5.22). This finding supports the first hypothesis. Significant differences between groups were not found with regard to frequency of use of Identification, $F(1,54)= 1.07, p= .31$. Thus the second hypothesis was not supported.

To test the third hypothesis, an ANCOVA was performed on the independent variable group for the mean score of the dependent variable Total Defense. This separate test was performed to avoid confusing results due to the linear relationship between this composite measure and Denial, Projection, and Identification. Results showed significant differences between groups, $F(1,54)= 4.64, p<.05$, with the abuse group exhibiting higher combined frequencies of defense use (adj. mean=16.61) than the nonabuse group (adj. mean = 14.97). Thus, the third hypothesis was supported.
To test the fourth hypothesis that Total Defense would have a significant positive correlation with age for each group, a Pearson Product Moment Correlation was performed on the dependent variable Total Defense by age and group. Results revealed a significant negative correlation with age for the abuse group, $r = -.35$, $p < .05$, but no significant relationship in the nonabuse group, $r = -.20$, $p > .05$. Thus, the fourth hypothesis was not supported.

To examine the fifth hypothesis, relative defense scores for Denial, Projection and Identification were calculated by dividing the total frequency of each defense by the Total Defense, yielding scores representing the relative contributions (percentages) of each defense to the Total Defense. Age was collapsed into four age groups corresponding to those in Cramer's (1987) norming study, primary (PRI; 6 yrs. 9 mos. through 8 yrs. 11 mos., $n=14$), intermediate (INT; 9 yrs. through 12 yrs. 11 mos., $n=22$), early adolescence (EA; 13 yrs. through 15 yrs. 11 mos., $n=17$) and late adolescence (LA; 16 yrs. through 16 yrs. 8 mos., $n=4$). MANCOVA was performed with group as the independent variable upon dependent variables Relative Denial, Relative Projection, and Relative Identification. Age group was used as a covariate. Results showed significant differences between groups, Wilks Lambda = .793, $F(3, 52) = 4.53$, $p < .01$. Univariate $F$-tests indicated that the overall differences between groups were in Relative Denial,
$F(1,54)= 8.99, p< .01$, with the abuse group using less relative denial than the nonabuse group. Another significant difference was in the use of Relative Identification, $F(1,54)= 10.73, p< .01$, with the abuse group using relative Identification more than the nonabuse group (see Figures 1 and 2). In comparing these findings to Cramer's (1987) hierarchy of defense development (see Figure 3), it is apparent that neither conformed to Cramer's (1987) findings in the fact that for both groups Relative Identification was surprisingly elevated in the primary age group and projection did not apparently increase in use after the primary stage for either group. In terms of answering the question put forth by the fifth hypothesis, group differences were significant for the relative defense measures, however, the nonabuse group did not approximate the developmental hierarchy pattern put forth by Cramer (1987).

**Post Hoc Analyses**

Significant differences were observed between groups with respect to the frequency of use of denial and projection, and in the overall use of defenses, but not in the frequency of use of identification. Taking into account that there are seven forms of each defense included in the DMM, the question of which forms of each of these defenses distinguishes the sexual abuse group from the nonabuse group is of clinical importance. Interrater reliabilities for
individual forms of each defense were computed using Pearson Product Moment correlation coefficients with the Spearman-Brown correction formula for multiple coders. Corrected reliabilities for each form of Denial, Projection and Identification are reported in Table 2. The forms of denial included in the DMM (Cramer, 1991) are: 1) omission of an object or character, 2) misperception, 3) reversal, 4) negation, 5) denial of reality, 6) maximizing the positive or minimizing the negative, and 7) unexpected goodness or optimism. A MANCOVA was performed with the independent variable group with age as a covariate on the mean scores for the dependent variables of each form of Denial (1-7). Results of this analysis indicated significant group differences, with Wilks Lambda = .600, F(7,48) = 4.56, p=.001. Univariate F-tests showed that, while controlling for age, the sexual abuse group used misperception F(1,54) = 13.46, p<.01, and reversal, F(1,54) = 16.58, p<.001, more frequently than the nonabuse group.

Although projection was not introduced into the primary hypotheses, significant differences were evidenced in the results of the analyses. The seven forms of projection included in the DMM (Cramer, 1991) are: 1) attribution of hostile or normatively unusual feelings, 2) addition of ominous people, objects or qualities, 3) magical or circumstantial thinking, 4) concern for protection against external threat, 5) apprehensiveness of death, injury, or
assault, 6) themes of pursuit, entrapment, and escape, and 7) bizarre or very unusual story theme. A MANCOVA was performed with the independent variable group with age as a covariate on the mean scores for the dependent variables of each form under the defense of Projection (1-7). Results were significant, with Wilks Lambda = .686, $F_{(7,48)} = 3.14$, $p = .008$. Univariate F-tests showed the sexual abuse group had higher frequencies of magical and circumstantial thinking $F_{(1,54)} = 7.73, p < .05$, and concern for protection against external threat, $F_{(1,54)} = 5.22, p < .05$, than the nonabuse group. The nonabuse group used bizarre themes with more frequency than the sexual abuse group $F_{(1,54)} = 5.73, p < .05$.

In the primary analysis of the hypotheses it was found that there were no differences between groups with regard to the overall frequency of use of Identification. However, in an effort to find if there are differences in the forms of identification that are characteristic of the groups, further analysis was necessary. The seven forms of Identification included in the DMM (Cramer, 1991) are: 1) emulation of skills, 2) emulation of characteristics, 3) regulation of motives and behavior, 4) self-esteem through affiliation, 5) work; delay of gratification, 6) role differentiation, and 7) moralism. A MANCOVA was performed with the grouping variable as the independent variable group with age as a covariate on the mean scores for the
dependent variables of each form under the defense of Identification (1-7). While the overall MANCOVA was not significant, with Wilks Lambda = .853, \( F(7,48) = 1.18, p = .333 \), Univariate F-tests indicated that the groups were significantly different with regard to the use of regulations of motives and behavior, \( F(1,54) = 4.80, p < .05 \), with the abuse group using this defense more frequently than the nonabuse group.

Another point of interest was the possibility of effects of family structure on defense scores. To examine the relationship, MANCOVA was performed on each group separately using family structure as the independent variable with age as a covariate on the dependent variables of Denial, Projection, and Identification. Results of this analysis for the abuse group showed significant differences, Wilks Lambda = .407, approximate \( F(3,19) = 9.22, p = .001 \). A Univariate F-test showed that the difference was in the frequency of use of Denial, \( F(1,21) = 28.32, p < .001 \), with the abuse subjects in non-intact families using significantly more than those in intact families. Results with regard to Projection and Identification were not significant. Using the same analysis, overall results were nonsignificant for the nonabuse group; however, univariate F-tests showed that use of denial was less in subjects with intact families than those in non-intact families, \( F(1,25) = 5.33, p < .05 \). ANCOVAs were performed for each group using
family structure as the independent variable with age as a covariate on the dependent variable Total Defense. While results of this analysis for the nonabuse group were not significant, results were significant for the abuse group, $F(1,26)=4.32$, $p<.05$, with subjects in intact families using overall defenses more frequently than subjects in non-intact families.
CHAPTER IV

DISCUSSION

The first hypothesis, that the abuse group would use higher frequencies of Denial in their TAT productions as measured by the DMM than the nonabuse group, was supported. However, the use of Denial did co-vary with age for the abuse group, with use of Denial declining with age. A decrease in use of denial with age is consistent with Cramer's hierarchy of defense development. However, the markedly higher use of Denial early in development followed by the gradual decline with age still leaves the abuse group at a level of use implying age inappropriate reliance on Denial. While both groups use denial, the sexual abuse group used it significantly more. From a clinical standpoint it is also useful to know that the forms of denial which differentiated the groups were reversal and misperception. Misperception involves the storyteller misidentifying something that is in the TAT picture. This form of denial, one of the most primitive, is most characteristic of infancy, occurring just as the infant becomes physically capable of perceiving reality. The other form of denial differentiating the groups was reversal, the form of denial identified by the storyteller making contradictory statements in a story.
without any storyline suggesting how this complete change occurred. It most often implies opposite ends of a continuum (e.g. "He’s crying. He’s laughing.").

The second hypothesis, that the sexual abuse group would use significantly lower frequencies of Identification in their TAT productions than the nonabuse group, was not supported. The use of Identification did not covary with age for the nonabuse group as was expected. While group differences in the frequency of the use of Identification were not significant, group differences did emerge in analyses using the measure of Relative Identification. Although this finding was opposite the predicted direction, the sexual abuse group using more Relative Identification than the nonabuse group, it has important implications in understanding the dynamics of sexual abuse and/or the properties of the Identification scale of the Defense Mechanism Manual. Both groups showed elevations in the use of Relative Identification for the primary (PRI) age group in comparison to Cramer’s norms. For intermediate (INT), and early adolescent (EA) ages, both groups conformed to Cramer’s (1987) developmental pattern. However, for the late adolescent (LA) ages, while the nonabuse group adhered to Cramer’s pattern, the sexual abuse group’s use of Relative Identification soared. Exploratory analyses of each individual form of Identification revealed that the group differences lie in Identification involving regulation
of motives or behavior. This form of Identification reflects the internalization of rules of parents, authority figures, or important others early in development. These internalizations are apparent in TAT stories when one character influences another’s behavior, when a character rebels or conforms to a societal norm, or expectation, when a character reflects upon his or her own behavior, or when a character receives justified punishment from a parent or authority figure (excluding jail and legal recourse). This form of Identification does not seem to fit under the rubric of mature Identifications that take place in adolescence, but seems, moreso, to fall into the realm of secondary identifications (superego formation), and possibly even reflects incorporative elements of primary identifications. This is one way of explaining the unexpected results regarding identification. The regulation of motives and behavior as described in the DMM can represent guilt and/or shame when a TAT character is negatively self-reflective. In instances when TAT characters receive unusually harsh punishment from a parental figure which the storyteller justifies in his or her storyline, construing it as normal, it is plausible that this is indicative of a harsh superego. The findings, cast in this light, are consistent with literature identifying shame and guilt (Pistole & Ornduff, 1993), harsh superego, and overcontrolled expression followed by explosive breakthrough of affect (Shengold,
1989) in victims of abuse. Thus, the higher relative use of Identification found in the sexual abuse group is not necessarily an indicator of mature identification expected to develop in adolescence.

The third hypothesis, that the sexual abuse group would have higher frequencies of defense use overall, as exhibited by a higher Total Defense score, was supported. This result is consistent with Dollinger and Cramer's (1990) study assessing children's defensive responses following disaster. The children who were assessed as least clinically upset following the disaster used more Total Defense than those who were more upset. While the present study could not assess the degree of clinical upset in the sample, it follows that sexual abuse might entail a degree of emotional upset or conflict, and may manifest the use of more defenses than what one might see in a less traumatized sample.

The fourth hypothesis, that Total Defense would increase with age for both groups, was not supported, as evidenced by the sexual abuse group's Total Defense showing a significant decrease with age. It is believed that this decrease was due to the decreased use of denial and projection with age. Another factor to account for the decrease is that the defenses included in this study are but a subset of the defenses developing, increasing in use and declining, over this age spectrum. Thus, the Total Defense score in this
study is not completely representative of all the defenses being used by an individual at a given time.

The fifth hypothesis stated that the plotting of mean relative defense scores of Denial, Projection, and Identification (see results section for the derivation of mean relative defense), across the age continuum for each group would reveal significantly different defense development patterns between groups. This hypothesis was supported, specifically with regard to the primary (PRI) and intermediate (INT) ages. It was also expected that the nonabuse group's profile would be similar to that of Cramer's (1987) norming sample. In comparing the relative scores to those in Cramer's norming sample, it was the case that the nonabuse group deviated from Cramer's findings as much as the sexual abuse group. One possible justification for the contrast between Cramer's (1987) normative sample, and both groups within the present study, is that Cramer's sample included both males and females, whereas the present study involved only females. Where defense frequency scores measure defense as an independent scale, relative defense scores imply that defenses do not occur in isolation, but rather, there is an interplay among defenses within a structure composed of many defenses. The relative defense score functions not only as an indicator of the degree a given defense is used, but simultaneously provides information about the other defenses being used. Relative
defense was helpful in conceptualizing patterns of defense development for each group. However, while group differences with regard to Relative Denial and Relative Identification were significant, knowledge of these differences was not meaningful without the knowledge of frequency scores.

Projection was not directly addressed in the hypotheses, mainly due to Cramer's (1987) findings that projection is heavily relied upon throughout childhood. Although this defense, as posited by Cramer (1987) tapers off with the development of identification, the tapering is slight and on the extreme end of the age spectrum being studied. So, while a strong trend (p=.07) regarding the frequency of use of Projection suggested that the sexual abuse group used more projection, it could also be the case that group differences are due to a lack of development of projection in the nonabuse group rather than the overreliance on projection in the sexual abuse group. Graphic representation of mean relative defense illustrates the somewhat underdeveloped defense of projection in both groups, although at different points in age. Results (using relative projection as the dependent measure) showed that, both groups' relative defense patterns deviated from the defense development hierarchy proposed by Cramer (1987; based upon the norming sample. Inflated relative use of denial and identification might have occurred at the expense of the development of relative projection, or vice-verse. These findings lead the
author to believe that the nonabuse group's status as a clinical comparison group makes it quite different than what might be thought of as a normal comparison group. Results of exploratory analyses regarding projection indicated the sexual abuse group used magical, autistic, or circumstantial thinking, (including a hypervigilance to details) more than the nonabuse group. The sexual abuse group created stories which often had no storyline, focusing only upon the details of the picture. In contrast, the nonabuse group used more bizarre themes creating TAT stories which were very strange.

Analyses of the defense frequency scores and relative defense use were fruitful in terms of empirical significance, and would be feasible for the clinician to incorporate in identifying and understanding some dynamics of victims of sexual abuse. In addition, by reducing the defense frequency scores into their components, qualitative differences between groups emerge in the forms of the defenses used. While findings with regard to specific forms of the defenses are interesting, and potentially useful, one must bear in mind how the interrater reliabilities vary widely across the numerous forms (see Table 2). While misperception, and regulation of motives and behavior had acceptable interrater reliabilities (~.80), reversal and magical thinking, circumstantial reasoning, and
hypervigilance to detail, had relatively poor agreement (-.50).

The concept of developmental hierarchy of defenses implies that immature defenses are still available to an individual even after preferential use of more mature defenses has been acquired. Results of this study suggest that mature defenses are used by the abuse group (if the Identification is mature Identification), indicating that these people continue to develop despite such trauma. It is clear, however, that the abuse group uses immature defenses, specifically denial, more than what is age appropriate (as evidenced in the elevated denial frequencies). This may imply regression from a relatively mature point of functioning to a less mature or primitive level under conditions of stress (e.g. sexual abuse, projective testing).

The findings of this study converge with sexual abuse literature and literature concerning Borderline Personality Disorder (BPD) suggesting that the history of sexual abuse is often found in this characterological configuration (Westen et al. 1990). The use of denial is characteristic of people with BPD (Kernberg, 1975; Willick, 1985). One distinction between borderline and psychotic structure is that the borderline individual is capable of distinguishing reality from nonreality. The ability to use mature defenses implies a degree of ego development which is related to
reality testing. One could speculate that the abuse victims' misperceptions of reality (denial) are somehow compensated for by their reliance upon identification with others who may (or may not) be more attuned to reality. These identifications may be, however, of an incorporative, immature quality. They may require an excessive dependence upon others (who may be abusive). Reversal, the other form of denial distinguishing the sexual abuse group, could also be adaptive in covering the victim's distorted perceptions.

Limitations.

Limitations of this study include the relatively small number of subjects, thus, limiting the generalizeability of results.

Interrater reliabilities obtained prior to rating for the study were higher for Denial, Projection and Total Defense, than those obtained in the actual study. It is believed that the decline in interrater reliability is due to a lengthy interval between practice sessions to obtain acceptable interrater reliability and the time that ratings for data for this study were undertaken. However, the markedly lower interrater reliability for Projection ($r=.58$) leaves some question as to the reliability of results of analyses using Projection frequency as a component. One possible reason for the lower reliability on the Projection scale is the ambiguity in distinguishing Projection, as a general process in projective testing, essential in creating
TAT stories, from Projection as a defense within the stories. Specifically with reference to the first form of projection in the DMM, Attribution of Aggression or Hostile Feelings, Emotions, or Intentions to a Character, or of Any Other Feelings, Emotions or Intentions that are Normatively Unusual, where the scoring seemed to require more subjective involvement of the rater than most of the other categories. Raters were to decide whether there was a justified reason embedded in the story for one character to make an attribution about another character, or for the storyteller to make an attribution about a character.

Another limitation is that due to the nature of this type of research, the purity of the nonabuse sample with regard to abuse status is not definite. One obvious limitation of this study is that it only involves the three defenses. One can therefore, not ascertain the degree to which either of the groups are employing other defenses, mature or immature. However, this limitation could as well be an advantage of the study in that it was feasible to conduct, and has generated some possibly useful conclusions and further hypotheses.

Results of this study are pertinent to the topic areas of defense, sexual abuse, projective measures, psychopathology and psychodynamic theories regarding ego development. It could also provide a missing link to help understand results of the host of studies examining object
relations with abuse samples (Freedenfeld, 1991; Ornduff, 
Freedenfeld, Kelsey, & Critelli, 1992), specifically with 
regard to findings showing the high percentage of 
primitive/pathological scores on Westen et al. (1985) 
measure of affect tone (concern for assault need for 
protection P4,) and the bimodal distribution for the sexual 
abuse group on this scale (elevated overall denial, 
reversal). Findings of the present study suggest that one 
might also expect to find lower level scores (1,2) on the 
social causality scale (magical, autistic and circumstantial 
thinking, hypervigilance to details, misperception, and 
reversal). The Pistole and Ornduff (1993) study using the 
Fine (1955) system for content analysis of TAT stories 
should be examined in conjunction with the findings of this 
study to see if the abuse group’s identification, 
(regulation of motives and behavior; DMM) are qualitatively 
different in terms of being more related to themes involving 
shame and guilt, or harsh punishment. These elements of a 
harsh superego, "bad me," low self-esteem, identity 
disturbances and self-damaging behavior often seen both in 
BPD and victims of sexual abuse, are indicative of 
identifying with an aggressor, an abuser, and require 
misperception of self and other. In clinical observation, it 
is not uncommon to encounter victims who reported having 
dissociated themselves at the time of abuse by focusing on a 
physical detail of the room (e.g., a spot on the wall or a
clock). This is not unlike the form of projection in the DMM, magical thinking, circumstantial reasoning, and hypervigilance to detail, found in the storyteller's exclusive attention to the physical details of the picture rather than venturing into the affective states or situations of the characters. These stories seem to have a dissociative quality. In dissociative disorders such as Multiple Personality Disorder (MPD), one can observe the defense of regulation of motives and behavior, the internalization of standards taken to such an extreme that the person loses the sense of self and becomes these internalized roles in a very concretized way.

The findings of the exploratory facet of this study should be further tested by assessing whether the specific forms of defenses found to be characteristic of the sexual abuse group (reversal, misperception, regulation of motives and behavior, magical, autistic, circumstantial thinking) could be used to distinguish between TAT protocols of sexually abused and nonabused subjects under blind rating conditions.

The subjects in the nonabuse group were referred for a variety of reasons (e.g., learning disabilities, school problems, ADHD, and depression), necessarily implying some type of dysfunction. Whereas, the subjects in the sexual abuse group were referred, not because of difficulties in functioning, but because they had been identified as having
been sexually abused. By virtue of this, it is clear that the study is comparing a group of sexual abuse victims, a circumscribed type of trauma, to a group of subjects also experiencing serious problems of various sorts. Thus, the findings in this study should help further pinpoint what one might expect to see in assessing sexual abuse victims that is above and beyond what one might see in assessing individuals with other serious problems.
Table 1

Summary scores for Denial, Projection, Identification and Total Defense for Abuse and Nonabuse Groups

<table>
<thead>
<tr>
<th></th>
<th>Abuse (n=29)</th>
<th>Nonabuse (n=28)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Denial</td>
<td>5.53</td>
<td>2.34</td>
<td>5.34</td>
</tr>
<tr>
<td>Projection</td>
<td>4.78</td>
<td>1.92</td>
<td>4.11</td>
</tr>
<tr>
<td>Identification</td>
<td>6.19</td>
<td>3.21</td>
<td>5.64</td>
</tr>
<tr>
<td>Total Defense</td>
<td>16.48</td>
<td>4.87</td>
<td>15.09</td>
</tr>
</tbody>
</table>

**p<.001      *p<.05
### Table 2

**Interrater Reliability *Coefficients for the Individual Forms of Denial, Projection and Identification**

<table>
<thead>
<tr>
<th>Denial</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Omission of Characters or Objects</td>
</tr>
<tr>
<td>2) Misperception</td>
</tr>
<tr>
<td>3) Reversal</td>
</tr>
<tr>
<td>4) Statements of Negation</td>
</tr>
<tr>
<td>5) Denial of Reality</td>
</tr>
<tr>
<td>6) Overly Maximizing Positive/Minimizing Negative</td>
</tr>
<tr>
<td>7) Unexpected Goodness, Optimism, Positiveness, Gentleness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Attribution of Negative, Hostile or Normatively Unusual Feelings</td>
</tr>
<tr>
<td>2) Addition of Ominous Characters, Objects or Qualities</td>
</tr>
<tr>
<td>3) Magical, Autistic, or Circumstantial Thinking</td>
</tr>
<tr>
<td>4) Concern for Protection Against External Threat</td>
</tr>
<tr>
<td>5) Apprehensiveness of Death, Injury or Assault</td>
</tr>
<tr>
<td>6) Themes of Pursuit, Entrapment, and Escape</td>
</tr>
<tr>
<td>7) Bizarre or Very Unusual Story</td>
</tr>
</tbody>
</table>
Table 2 continued

<table>
<thead>
<tr>
<th>Identification</th>
<th>χ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Emulation of Characteristics</td>
<td>0.30</td>
</tr>
<tr>
<td>2) Emulation of Skills</td>
<td>0.00</td>
</tr>
<tr>
<td>3) Regulation of Motives, or Behavior</td>
<td>0.76</td>
</tr>
<tr>
<td>4) Self-Esteem Through Affiliation</td>
<td>0.63</td>
</tr>
<tr>
<td>5) Work; Delay of Gratification</td>
<td>0.85</td>
</tr>
<tr>
<td>6) Role Differentiation</td>
<td>0.85</td>
</tr>
<tr>
<td>7) Moralism</td>
<td>0.81</td>
</tr>
</tbody>
</table>

* Pearson Product Moment Correlation corrected with the Spearman-Brown formula for multiple raters.
SEXUAL ABUSE

Figure 1. Mean Relative Defense as a function of age group in the sexual abuse group.
Figure 2. Mean Relative Defense as a function of age group in the nonabuse group.
Figure 3. Mean Relative Defense as a function of age group as suggested by Cramer's (1987) study using a normative sample.
REFERENCES


prestages of defenses: Diagnostic and therapeutic

molestation: Variables related to differential impacts
on psychosexual functioning in adult women. *Journal of

Tufts' New England Medical Center, Division of Child
(Final report for the office of Juvenile Justice and
Department of Justice.

ego mechanisms. *Archives of General Psychiatry, 24*,
107-118.

Van der Leeuw, P. J. (1971). On the development of the
concept of defence. *International Journal of
Psychoanalysis, 52*, 51-58.

Scale for Children - Revised.* New York: The
Psychological Corporation.

Weintraub, W., & Aronson, H. (1962). The application of
verbal behavior analysis to the study of psychological
defense mechanisms: Methodology and preliminary report.
*Journal of Nervous and Mental Disease, 134*, 169-181.


behavior: Adaptation and psychopathology (pp. 39-79).
New York: Springer.


