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## A Comparison of Coping Styles and Body Image of Abused and Non-Abused Women

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A COMPARISON OF COPING STYLES AND BODY IMAGE  
OF ABUSED AND NON-ABUSED WOMEN

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A Dissertation Submitted to the Faculties of

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Old Dominion University

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## ABSTRACT

### A COMPARISON OF COPING STYLES AND BODY IMAGE OF ABUSED AND NON-ABUSED WOMEN

Laura Elizabeth Brown  
Virginia Consortium for Professional Psychology, 1997  
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This study compared body image, patterns of coping, and the relationship between these factors in subjects with and without a reported background of childhood incest. Self-report measures of personal experience (Relevant Variable Questionnaire and the Assessment of Coping Interview), body image (the Human Figure Drawing Test (HFDT) and the Body Image Assessment (BIA)), and coping (the Dissociative Experiences Scale (DES), the Albert Einstein College of Medicine (AECOM) Coping Scale, and the Symptom Checklist-90-Revised (SCL-90-R)) were administered individually to twenty-two women with reported incest histories and an equal number of women with no reported history of sexual or physical abuse. Significant between-groups differences indicated that individuals reporting incest were characterized by greater general distress, increased body image distortion, and greater use of dissociation, compared to non-abused subjects. Individuals reporting incest also exhibited differences related to body image in childhood, including less physical activity and mild cognitive impairment, reflected in drawings of self. Additionally, preliminary analysis showed an interaction between body

image and coping styles, such that individuals with greater body distortion showed preference for a less advanced coping style (Substitution), while those with less body distortion and/or no history of incest manifested a preference for an advanced, cognitively based coping style (Replacement). Physical force in conjunction with incest was not associated with differences in body image distortion or coping patterns. These results suggest several avenues for further research of clinical intervention with individuals with a history of incest, including attachment and body-based interventions in childhood and/or adulthood.

To Rick Fiske  
who believed in this endeavor

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## INTRODUCTION

This study was designed to investigate the psychological consequences of childhood sexual abuse. Evidence suggests that a significant percentage of the female population in psychological treatment reports a history of incest (Goodwin, 1989; Coons, Bowman, Pellow & Schneider, 1989). This is considerably higher than the prevalence of sexual abuse reported by the male population; records of one sexual trauma center reported that 6% of clients were men, and it has been estimated that between 2.5% and 8.7% of men in the general population were sexually victimized as children (Meyers, 1989). Experiences of incestuous violation are thought to interfere with critical developmental processes, including the construction of body image and the ability to effectively adapt to the environment (Cole & Putnam, 1992).

Based on a review of the literature, it was hypothesized that a reported history of incest would be associated with less cohesion of body image (Human Figure Drawing Test (HFDT) and Body Image Assessment (BIA)) and less effective coping strategies (Symptom Checklist-90-Revised (SCL-90-R)) than would a reportedly non-abusive history. Further, it was postulated that a demonstrable relationship exists between the extent of development of body image (HFDT and BIA) and the level of primary coping strategies (Albert Einstein College of Medicine (AECOM)

Coping Scales, Dissociative Experiences Scale (DES) and Assessment of Coping Interview). Because the objective of this study was to investigate potentially documentable connections between two aspects of personality, a correlational study comparing a group of women with incest histories with a comparison group with no reported history of sexual or physical abuse was selected. Both quantitative and qualitative measures were used to assess coping abilities from a perspective of resiliency.

The major premise of this study was that a fundamental connection exists between physical and cognitive-emotional development (Ford, 1993). This link has been explored from a variety of perspectives, including the psychoanalytic work of Wilhelm Reich (1972) and the cognitive developmental studies of Jean Piaget (1957). This study provides preliminary support for the premise that the conceptualization of one's body (body image) is associated with physical and emotional experience, including sexual abuse, and related to the development of strategies for adaptation within the environment (coping). It identifies avenues for further exploration of clinical interventions within developmental and coping theory.

## BACKGROUND

### Childhood Incest

Finkelhor's (1979) extensive study of child sexual abuse reported a 14% rate of sexual abuse among college women, with a 1% prevalence rate for exclusively paternal incest. Surveys of clinical populations indicate a significantly higher prevalence; approximately one quarter of female outpatients and more than one third of female inpatients report histories of childhood incest (Goodwin, 1989; Coons et al., 1989).

Incest-related dysfunctions clearly constitute a significant treatment concern (Goodwin, 1989; Gelinas, 1983). Childhood sexual abuse, particularly incest, has been significantly and repeatedly associated with diagnoses of borderline personality disorder, Dissociative Identity Disorder (Multiple Personality Disorder), somatoform disorders, eating disorders, and substance abuse disorders in women (Cole & Putnam, 1992). Post-traumatic stress symptoms have also been identified in more than half of the women who seek treatment (Goodwin, 1989; Coons et al., 1989) for sexual abuse. According to Cole and Putnam (1992), disruption in self-development is suggested by common themes within these disorders of deviations in "defining, regulating, and integrating aspects of self" (p. 175) and in ability to experience trusting relationships. Of particular interest in this study are disturbances of body experience.

These disturbances of the physical and phenomenological sense of self, including body image distortion, can be understood as reflections of deviations in the intrapsychic processes of defining and integrating aspects of the self (Cole & Putnam, 1992).

### Body Image

Body experience has been repeatedly recognized as central to personality development (Fisher, 1986). Piaget identified body perception as a critical organizing force in the establishment of schemata (Piaget, 1976); traditional psychoanalytic theory ties body organ experience closely with the development of psychic structure (body schema), including defenses (Brenner, 1957). The work of Wilhelm Reich further asserted the centrality of body in relation to emotional and unified personality functioning. According to Schilder (1950), physical pain can affect body image development, such that the body schema was altered and body image disorganized. This understanding of the relation of trauma to body image and function was further developed by Lowen (1976) and others (Skatteboe, Friis, Hope, & Vaglum, 1989; Reich, 1972) and regarded as central to the individual's experience of self and environment.

### Body Image Development

Beginning in infancy with representations of sensorimotor experience (Putman, 1989; Mahler, Pine & Bergman, 1975; Fisher, 1986), body image evolves in a

predictable, systematic maturational pattern (Groves & Fried, 1991; Feiner, 1987; Schilder, 1950). This developmental sequence has been investigated in both normal children (Wallon & Lang, 1989; Feiner, 1987) and special populations (Robinson et al., 1986), resulting in the establishment of preliminary paradigms. Although this exploration is not yet complete (Fisher, 1986), some normative maturational guidelines may be inferred. Children are generally able to identify their physical self and gender by approximately 20-24 months of age (Cole & Putnam, 1992) and demonstrate increasing levels of cohesion between 2 and 5 years (Feiner, 1987). It appears that significant changes in body image, including body boundary, occur at approximately age 9 to 10 (Fisher, 1986; Liebetrau & Pienaar, 1974), and adolescence is recognized as a period in which body image becomes reorganized to include secondary sex characteristics within the context of complex social and cognitive developments (Cole & Putnam, 1992).

Differentiation of body from environment is considered to be a key dimension of body concept (Witkin, Dyk, Goodenough & Karp, 1962). An individual's self-identity and self-confidence may be perceived as related to the degree and the nature of bodily awareness (Fisher, 1986). There is indication that body image tends to be consistent from late childhood into adulthood. According to Witkin and his colleagues (1962), the degree of body concept

differentiation manifested at age 10 significantly predicts the degree of differentiation displayed in adulthood.

### Human Figure Drawings

One approach to the measurement of body image entails the use of human figure drawings to assess characteristics of personality from several theoretical perspectives. Figure drawings have been used to assess levels of cognitive (Goodenough, 1926; Slansky & Short-Degraff, 1989; Van Arsdel, 1983; Goldberg, 1989; Miller, Veltkamp, and Janson, 1987) and emotional development (Plutchik & Conte, 1989) and body image (Witkin et al., 1962; Swensen, 1968; Wallon & Lang, 1989) at all ages.

Analytic approaches have used human figure drawings as a projective technique for clinical assessment, based on the work of Machover (Mitchell, Trent, & McArthur, 1993). According to Machover's theory, human figure drawings represent the individual's perception of his/her own body. This concept and technique has been applied extensively to assess body concept or body image (Howe, Burgess, & McCormack, 1987). According to Wallon and Lang (1989), body image is

a complex, controversial concept that  
cannot be measured directly. . . .

Drawings are considered to be an excellent  
way to evaluate the psycho-affective  
maturation of children. Here one



considers the degree to which the child perceived and integrated his/her body image. The comparison between different phenomena undoubtedly have limits to their use, but show characteristics of testable, scientific hypotheses (p. 641).

Studies with adults (Swensen, 1968; Wallon & Lang, 1989) also have tended to support the hypothesis that drawings reflect one's body image. According to Swensen (1968), almost all studies using adult subjects showed a "consistent relationship between the Draw A Person test (DAP) and some other measure of body image or self-concept" (p.25).

Human figure drawings have been applied to both clinical (Adams-Tucker, 1984) and empirical work with abused children (Hibbard & Hartman, 1990). Hjorth and Harway's (1981) investigation of the body image of physically abused children found significant differences in several specific aspects and in overall body image. These results were supported by investigations of the drawings of sexually, physically, and non-abused adolescents (Howe et al., 1987) and of sexually and non-abused children (Burgess, 1988), both of which identified significant differences in figure representations.

At least one study has examined current and retrospective drawings of self. In a comparison of

individuals' portrayal of self currently (Self now) and at the time of abuse (Self younger), Burgess' (1988) results indicate that memory of an identified, anxiety-associated event is elicited, suggesting that a representation of childhood experience can be accessed with this approach.

It is widely assumed that assessment of body image in adulthood, using human figure drawings, is likely to reflect a level of development established in childhood. According to several studies (Gardner et al., 1990; Koff & Kiekhof, 1978), rates of overestimation of body size by children are similar to those of adults, suggesting that the cognitive predisposition is established early in development and maintained into adulthood.

The term "body image" is most commonly used to describe an individual's mental picture of her/his body, and/or her/his attitude toward it (Williamson, Davis, Bennett, Goreczny & Gleaves, 1989). This study is primarily interested in this image and the level of distortion reflected in it.

#### Sexual Abuse and Body Image Distortion

The prevalence of a high frequency of somatic disturbances, including gastrointestinal disturbances, pelvic pain, and pseudoseizures (Briere & Runtz, 1987) among individuals incestuously abused as children points to the likelihood of disturbances and distortions of body image within this population (Beardslee, 1992; Cole and Putnam,

1992; Hartman & Burgess, 1986a). There have been relatively few studies examining the body image of abused children (Gardner et al., 1990). In one study conducted by Gardner and associates (1990), sexually abused children were found to exhibit a tendency to state that their body is distorted in size, which is not shared by either physically abused or non-abused children. This bias to report body size distortion has also been identified in anorectic individuals (Gardner & Moncrieff, 1988), who, as a group, report high frequencies of childhood sexual abuse (Gardner et al., 1990).

The Body Image Assessment (BIA) (Williamson et al., 1989) is an indirect measure of body image distortion, developed to facilitate the investigation of body distortion in women with eating disorders. The high correlation between eating disorders and a history of sexual abuse (Gardner et al., 1990) suggests that the BIA is an appropriate measure for use with women who reportedly have experienced childhood incest.

#### Body Image and Coping

It has been suggested that body experience is fundamental to the development and organization of cognitive, emotional, and relational resources as coping abilities (Freud, 1927; Cole & Putnam, 1992). Although an event may be brief, its consequences can be extensive and chronic (Rutter, 1981). The meaning and impact of events

may be related to their relevance to the timing of the life cycle (Rutter, 1981). Sexual abuse (incest) is likely to have different meanings, based upon pre-existing beliefs (Hartman & Burgess, 1986), to, for example, a pre-pubescent and post-pubescent child. These differences are likely to be reflected in the impact of the event and in the coping strategies utilized to adapt to it. It is likely that a child's beliefs, relative to the individual's age at the time of abuse, are instrumental in determining a coping strategy.

#### Development of Coping Styles

Coping styles mediate the effects of stressful events and play a major role in subsequent physical and psychological well-being (Endler & Parker, 1990). There is agreement that there is no single, successful coping strategy; rather, effective coping approaches vary with the circumstances (Rutter, 1981; Plutchik, 1985). Among common styles, some may more effectively facilitate adaptation than others.

As with body image, coping strategies appear to develop progressively as a result of physiological, cognitive, and emotional maturation. In early infancy, babies manifest several self-regulatory behaviors which serve as avoidant and instrumental coping strategies, including dissociation (Cole & Putnam, 1992). During preschool years (ages 2-5) dissociation and denial appear to be common coping

mechanisms (Cole & Putnam, 1992). Coping during childhood (approximately 6 to 11 years) is characterized by increased reliance upon interpersonal support and cognitive coping strategies, including rationalization and blaming (Cole & Putnam, 1992), with decreases in the previously dominant mechanism of denial and dissociation. Adolescence is normally characterized by an increase in the awareness of inner processes and personal and interpersonal understanding, manifested in the emergence of self-reflection as a strategy for coping and adaptation (Cole & Putnam, 1992).

### Styles of Coping

Plutchik and Conte (1989) have described eight coping styles attributed to the "transformation of unconscious defenses into conscious ways of interacting with others" (p. 262) in the Albert Einstein College of Medicine (AECOM) Coping Scales. Consistent with other models (Rutter, 1981; Endler & Parker, 1990), these behavioral manifestations are perceived to be normal efforts to respond to problematic or stressful situations. Each style is considered to be a common strategy which may be used to varying degrees across a range of situations. Unlike other approaches, these styles are conceptualized within a theoretical framework of emotion, as derivatives of eight basic emotional dimensions (Plutchik & Conte, 1989; Plutchik, 1984; 1980) which correspond to an equal number of associated ego defenses:

suppression-repression, minimization-denial, reversal-reaction formation, mapping-intellectualization, substitution-displacement, blame-projection, replacement-compensation, and help seeking-regression (Plutchik & Conte, 1989). Several of these dimensions, such as help seeking, mapping, and replacement, are also reflected in approaches identified by Beardslee and Podorefsky (1988) as characteristic of highly adaptive individuals.

One study using the AECOM Coping Scales (Rim, 1991) is particularly relevant to this study. Rim (1991) explored the relation between clinically identified defense mechanisms most frequently used by holocaust survivors (Denial, Regression, Suppression and Isolation) and predominant coping styles, as measured by the AECOM Scale. Results provide some preliminary support for the premise that the use of defense mechanisms and coping styles are linked, and suggest directions for further empirical study of particular coping styles within this population. The similarity of clinically observed defenses in this population and other trauma survivors (Myers, 1989; Briere & Runtz, 1987) suggests that similar styles and patterns of coping may also be expected in survivors of incest. Evidence supports the use of this scale to identify coping styles and effectively discriminate between groups of women (Conte, Plutchik, Galanter, & Jacoby, 1991; Rim, 1991). Its compatibility with the Assessment of Coping Interview

further supports its relevance for this study.

### Development of Defenses

The correlation between defense mechanisms and styles of coping, drawn by Plutchik and Conte (1989), invites a developmental view of coping. Emotional defenses are traditionally perceived as developing sequentially, beginning in infancy, to reduce intrapsychic conflict stemming from anxiety. The model of defenses delineated by Anna Freud (Blanck, 1974) is expanded upon in the subsequent work of ego psychologists. In a model of personality development presented by Blanck (1974), the defensive structure is seen as forming through reciprocal interaction with both internal and external events. During the early part of the oral stage of psychosexual development, denial emerges as the first defensive function of the infant, followed by introjection and projection. As personality progresses toward the anal stage, strategies of reversal, displacement, undoing, and reaction formation are added to handle more advanced demands. Isolation and intellectualization develop in conjunction with phallic concerns, preceding the defensive functions of regression and repression. As the genital level of development is accomplished, the resolution of Oedipal ambivalence is accompanied by a change in function of defenses toward adaptation.

The change in the function of defenses from pre-genital

to genital levels of adaptation, described by Blanck (1979), is incorporated into Plutchik's psychoevolutionary theory of emotions. Plutchik draws the following distinction between defenses and coping styles:

ego defenses are unconscious mechanisms  
used to deal with conflicted emotions and  
coping styles are conscious mechanisms used  
to deal with conflicted emotions (Plutchik  
& Conte, 1989, p. 245)

According to Plutchik and Conte (1989), an array of coping styles, paralleling defense functions, develops. In this theory, all styles are considered normal, although some are likely to be more effective than others. Although all styles are generally employed by most individuals, unique patterns of preferred coping styles, emphasizing particular strategies, tend to be manifested.

Using the Plutchik and Conte's (1989) premise of parallel coping strategies, it becomes possible to posit a sequence of coping strategies, which may be selectively engaged. For example, the empirical results reported by Cole and Putnam (1992), indicating that the use of denial and dissociation appears to remain high in sexually abused children, suggests that a parallel coping style of minimization may be preferred later.

#### Assessment of Coping Interview

It is evident that all individuals do not respond



uniformly to even very similar events, and research exploring sexual abuse reveals considerable variation in the type and degree of difficulty experienced by survivors (Browne & Finkelhor, 1986; Follette, Alexander, & Follette, 1991; Cahill, Llewelyn & Pearson, 1991). Consistent with a more static concept of stress, studies have frequently focused upon specific characteristics and effects of stressful situations, so that significant information about the associated characteristics has been accumulated. However, consistent agreement regarding what and whether specific factors are reliably associated with difficulties experienced has not been reached. In order to understand coping approaches of individuals confronted with similar traumatic experiences, it is necessary to go beyond identification of styles and appraise subjective responses to the identified event. Rutter (1981) proposes that life events be differentiated according to their meaning and consequences and asserts that "we need to study the various different ways in which stress events may influence both the developmental process and also later functioning" (Rutter, 1981, p. 350).

Structured, personal interviews have been repeatedly used to garner precise and individualized information (Pynoos & Eth, 1986; Baker, Berry, & Adler, 1987; Keller, Beardslee, Dorer, Lavori, Samuelson & Klerman, 1986; Herjanic & Reich, 1982). Analysis of interviews exploring

coping strategies with long-term activists within the civil rights movement (Beardslee, 1983) and with the offspring of parents with affective disorders (Beardslee & Podorefsky, 1988) indicated several common themes among those individuals who showed greatest resiliency. These factors included the centrality of relationships, an action-oriented stance, and self-understanding, manifested as an accurate appraisal of the situation, action congruent with this appraisal, and the capacity to integrate the event(s) into the larger meaning of one's experience (Beardslee, 1983; Beardslee & Podorefsky, 1988; Richmond & Beardslee, 1988). The persistent and deeply disruptive patterns of incest suggest that this model is similarly relevant to the experience of incest survivors. A structured interview was adapted for this study from the relevant interviewing approaches of Beardslee and Podorefsky (1988), Garmezy (1983), Belenky and her colleagues (1986) and Abell and Sommers (1991). The Assessment of Coping Interview was used in this study to explore in-depth individuals' unique experience within the context of their environment (Beardslee, 1992). In order to specifically address body experience, Beardslee's identified characteristic of "action orientation" was operationalized to refer to a level of physical activity.

#### Sexual Abuse and Coping

As with other stressful events, a child's ability to

cope with sexual abuse tends to be influenced by the resources available to the child during particular phases of the abuse event (Hartman & Burgess, 1986a). Sexual abuse in childhood impacts the child's developing ego (Hartman & Burgess, 1986a) during the time when the personality is forming. Managing this experience frequently requires a coping process of encapsulation (Hartman & Burgess, 1986a; 1986b) in which an individual attempts to regulate traumatic experience by separating it, facilitated by silence and defensive stance, from the customary avenues of information processing. This strategy of coping keeps traumatic experience perpetually in the present tense, and "depletes the child's psychic energy and thus disrupts the continuity of development of the other areas of the child's psychological make-up" (Hartman & Burgess, 1986a, p. 87). The premise is supported by studies indicating that the use of more primitive strategies of denial and dissociation appear to remain high in sexually abused children (Cole & Putnam, 1992). This suggests that reliance on these coping strategies limits the resources available to establish more emotionally and cognitively advanced adaptive strategies of coping.

#### Factors Affecting the Impact of Abuse

Paternal incest appears to be paradigmatic for all incest (Gelinas, 1983; Browne & Finkelhor, 1986; Cole & Putnam, 1992), in that it entails the disruption of a

primary relationship and tends to be associated with longer duration and more severe sequelae. The majority of incest perpetrators are male and most incest victims are girls (Gelinas, 1983). Based on these findings, this study targets women who have been sexually abused during childhood by a male relative or close adult friend.

Several studies have focused on identifying and evaluating the effects of specific aspects of trauma. Hartman and Burgess (1986) have investigated the effect of specific factors on the impact of abuse and identified a series of phases contained within the "event" of sexual abuse and recovery for children and adolescents. According to the authors, the effectiveness of the child's coping is dependent upon the interaction of several factors during various phases within the abuse and recovery process (Hartman & Burgess, 1986). The more social and psychological coping mechanisms the child has acquired prior to the abuse, the better she is likely to handle the trauma of abuse. Two of the factors identified as most important in this process, the availability of environmental supports and relationships with adults, are consistent with Beardslee's (1983) concept of resiliency. The child's psychological organization has also been associated equally with effective management of trauma (Hartman & Burgess, 1986). This latter factor does not necessarily correspond to chronological age; however, both are related to the

developmental process within which chronological age is a critical element. This is consistent with other reports (Browne & Finkelhor, 1986) which indicate that the age of initial abuse is critically related to the severity of its effects. Within the abuse phase of the event (while the incest is occurring), three factors in particular are thought to affect the child's resources at the time of abuse: age, defenses and coping mechanisms used, and symptoms manifested (Hartman & Burgess, 1986).

Additional characteristics associated with severity of response to sexual abuse have been identified. The presence of force has been shown to be a significant factor (Herman, Russell, & Troika, 1986). Empirical trends (Browne & Finkelhor, 1986; Herman et al., 1986; Follette et al., 1991) also suggest that paternal incest (without significant difference between biological or surrogate (Follette et al., 1991; Browne & Finkelhor, 1986)) has more negative impact. Additional factors related to the severity of subsequent symptomatology, including the duration of the abuse pattern (Follette et al., 1991; Schetky, 1989), family characteristics (Follette et al., 1991; Schetky, 1989) and intrusive sexual contact (Browne & Finkelhor, 1986, Herman et al., 1986) have been identified by some.

### Hypotheses

It was hypothesized that:

1. childhood incest is associated with the disruption of

body integration. Based upon theory (Cole & Putnam, 1992) and empirical results (Gardner et al., 1990) it was expected that:

a. women reporting incestuous abuse as children would show greater body distortion (as reflected in the HFDT and BIA) than those reporting no abuse.

b. women reporting abuse involving force would show greater body distortion than those who did not report the use of force.

It was also anticipated that:

2. childhood incest is associated with patterns of coping in adulthood. Specifically, it was hypothesized that:

a. women reportedly incestuously abused in childhood would manifest patterns of coping dominated by less advanced coping strategies, including denial and dissociation (Cole & Putnam, 1992) (as measured by the DES and AECOM), to a greater extent than women reporting no abuse.

b. women reportedly experiencing incest prior to age 10 would show a preference for more primitive coping strategies (as measured by the DES and AECOM) compared to those whose reported incest began at age 10 or later.

c. when the abuse reportedly involved force, less relational centrality and physical activity (as measured by the Assessment of Coping Interview) would be reported.

It was further hypothesized that:

3. women's preferred coping styles and amount of body image

distortion are associated. Specifically, it is predicted that:

a. less body distortion (as measured by the HFDT and BIA) will be associated with more advanced cognitive coping strategies (such as rationalization and self-reflection) as measured by the AECOM and Assessment of Coping Interview.

b. the use of dissociation and/or denial as primary coping strategies (as measured by the DES and AECOM) will correspond to greater body distortion (as measured by the HFDT and BIA) .

## METHOD

### Subjects

Subjects were 44 women between the ages of 19 and 71, selected by pre-established criteria. Basic criteria for inclusion required that all subjects be female, 18 years or older, and English speaking. Additionally, all subjects met the criteria for one of two sampling groups: Group I (Reportedly Incested), composed of 22 individuals who reportedly experienced childhood incest, entailing the presence of sexual contact consistent with the above definition (sexually abused during childhood by a male relative or close adult friend), prior to age 18, and Group II (Comparison), composed of 22 individuals who reportedly had not experienced sexual or physical abuse. Subjects were recruited from community based groups organized around some aspect of personal growth (self-help and support groups, continuing education and undergraduate classes), in several geographical areas, including the Tidewater area of Virginia, southwestern New Hampshire, and Boston, Massachusetts. Recruitment was facilitated through oral presentation (by the author or other prepared personnel) and/or explanatory flyer (see Appendix A). Additional individuals who became aware of this study through other avenues, such as contact with participating subjects, group members, and involved personnel (therapists, instructors), and self-referred were also accepted.



Demographic information suggested that subjects were drawn from diverse lifestyles. Two fifths (40.9%) of the subjects were married or cohabitating, slightly less than one third (31.8%) were single, and 18.2% reported themselves as divorced. The remaining women were widowed (9.1%). The greatest percentage (40.5%) of subjects reported income levels below \$10,000, over one third (35.7%) earned between \$10,000 and \$35,999, and almost one quarter (23.8%) reported an income of \$36,000 or more.

A comparison of the characteristics of Groups 1 and 2 suggests that these may represent somewhat different populations. (Demographic information for each group is presented in Table 1.) No significant difference (two tailed t-tests) in age ( $t=1.26$ ,  $df=42$ ,  $p<.21$ ,  $n=44$ ), education level ( $t=-1.09$ ,  $df=42$ ,  $p<.28$ ,  $n=44$ ), or marital status ( $t=2.0$ ,  $df=42$ ,  $p<.052$ ,  $n=44$ ) was found between groups. The average age of Group 2 was approximately five years younger and more variable than that of Group 1; groups showed equivalent age ranges (Group 1 = 19-68 years, Group 2 = 19-71 years), with greater variability found in Group 1).

Groups were significantly differentiated by income level ( $t=2.94$ ,  $df=40$ ,  $p<.005$ ,  $n=42$ ), with Group 1 reporting higher incomes. Over half of Group 2 was single with an income of \$10,000 or less, compared to less than one third of single individuals with incomes more evenly distributed between lower, medium, and higher levels in Group 1. These

differences can be attributed to a greater percentage of students represented in the comparison group (Group 2).

Table 1.

Demographic Information

Group	Incest Reported (1)	n	Comparison (2)	n	Total	n
Age		22		22		44
Mean	37.91 years		32.55		35.23	
SD	10.16		17.10		14.16	
Education		22		22		44
Mean	14.52 years		15.27		14.90	
SD	2.48		2.07		2.29	
Income**		21		21		42
<\$10,000	19.0%		61.9%		40.5%	
\$10,000-\$35,999	42.9%		28.6%		35.7%	
>\$36,000	38.1%		9.5%		23.8%	
Marital Status		22		22		44
single	9.1%		54.5%		31.8%	
married/ cohabitate	63.6%		18.2%		40.9%	
divorced/ widowed	27.3%		27.3%		27.3%	

\*\*p<.01

Paternal incest was most commonly reported by the women with reported histories of sexual abuse. Sixty-three percent of this group reported having been sexually abused by a father, foster-father or step-father. Slightly over 40% reported sexual abuse by a non-paternal male relative such as an uncle, and 18% described sexual contact with a sibling three or more years older. Approximately one half of the sample reported multiple perpetrators, concurrently or sequentially. The age of onset for sexual abuse ranged from infancy to 13 years, with an average age of initial

abuse of five (5.27) years old. For nearly 73% of this group, the duration of reported incest was over five years; for another 13% (13.6), sexual contact lasted for 3 to 5 years.

The use of force has been identified as relevant to the effects of sexual abuse (Herman et al., 1986). Of the group who reported incest, 86.5% reported that they had been threatened, directly or indirectly; of this group, 89% reported having experienced at least moderate fear. One half of the women in Group 1 reported having been hit by the perpetrator, while almost one third (31.8%) denied that they had experienced any physical force.

### Measures

#### Relevant Variable Questionnaire. (Appendix B).

This 27 item self-report questionnaire was adapted from those used in clinical and empirical work with children and adults (Burgess, unpublished; Childers, unpublished) to provide detailed factual information related to demographics, details of reported abuse and offenders, and familial/social response in order to monitor relevant variables.

#### Assessment of Coping Interview. (Appendix B).

The interview approach used in this study was initially developed as part of a study of resilient children of schizophrenic parents, based upon the work of Finkleman and Garmezy (1979). A standard of "behavioral competence"

(Beardslee, 1992) was established and a 5-point rating scale was developed to identify adaptive behavior. The "best" behavior, quantitatively, was selected and rated for overall dimensions (common themes). This provided a more detailed evaluation and facilitated the identification of several predominant themes associated with those individuals who manifest superior adaptation in adverse circumstances, including external activities, relationships, and self-understanding.

The interview used for this study made use of a similar approach, with particular attention focused on those dimensions identified as relevant to resiliency. The interview focused on the topics of social context (relationships), coping activities undertaken (reflecting the capacity to act), reflection, both of one's self (self-understanding) and one's life (including family relationships), and differentiation from the source of painful past experiences (Beardslee & Podorefsky, 1988; Beardslee, 1992). For example, individuals were asked "Outside of your family, who was most important to you?" (relationships), "What kept you going when things were tough?" and "What did you do to feel better" (coping), "Were you physically active? What kinds of things did you do best?" (physical activity), "How did you understand what was happening in your family at this time?" (self-understanding), and "Is the way you see yourself now

different from the way you saw yourself in the past? In what ways?" (differentiation from past experiences).

The structured interviews used by Belenky and her colleagues (1986) to explore women's development of self, voice, and thinking have been incorporated into this framework. Their approach, and that of Abell and Sommers (1991), who adapted this interview schedule to explore the experience of voice with incest survivors in the therapeutic process is particularly relevant to this study. The basic schedule has been expanded to include other concerns related to body concept (Gardner et al., 1990).

Albert Einstein College of Medicine Scale of Coping Styles (AECOM Coping Scales). (Plutchik & Conte, 1989).

This 87 item self-report questionnaire was developed to identify individual coping styles (Plutchik & Conte, 1989) within a psychodynamic framework. Eight scales correspond to eight identified styles of coping: suppression, minimization, reversal, mapping, substitution, blame, replacement, and help seeking. Each item is rated on a 4-point scale reflecting the frequency with which it is used (never, rarely, sometimes, often) by the respondent. Average internal reliabilities of .70 for the eight scales have been reported (Plutchik & Conte, 1989).

The AECOM Scale has been used with both normal and patient groups (Plutchik & Conte, 1989; Conte et al., 1991; Rim, 1991) with alcoholic (Conte et al., 1991), prisoner,

student, schizophrenic and middle managerial (Plutchik & Conte, 1989) populations. Significant differences between alcoholic and non-alcoholic women (Conte et al., 1991), prisoner and student, and schizophrenic and non-schizophrenic groups (Plutchik & Conte, 1989) have been reported. Initial studies by Plutchik and Conte (1989) did not reveal sex differences in coping styles; however, later work (Conte et al., 1991) indicated significant sex-related differences.

Body Image Assessment (BIA). (Williamson et al., 1989).

This instrument consists of nine female silhouettes in graduated sizes from thin to obese, from which an individual selects her current body size (CBS) and ideal body size (IBS). Norm tables, referenced by height and weight, provide a framework for comparison of the CBS, from which a distortion index may be computed. According to Williamson and his colleagues (1989, p. 437)

. . . the degree to which CBS is  
elevated from norms for a particular  
height-weight group can be regarded  
as body image distortion . . .

The BIA has been adapted for brief administration (Cash, 1993) by arranging all nine silhouettes randomly on each of two sheets. Preliminary studies suggest equivalent results are obtained using this form of administration (Cash, 1993).

The BIA was developed for research with anorectic and bulimic individuals (Williamson, personal communication, January 1997). With this population, it has demonstrated adequate reliability and validity in the assessment of body image distortion. Test-retest correlations of .90 have been shown for current body size (CBS) across 1 to 8 week intervals (Williamson et al., 1989). It has been shown to successfully differentiate between bulimic and non-bulimic (compulsive overeating and non-eating disordered) women (Williamson et al., 1989). Because this study focuses on body image, only the CBS score measuring perceived current body size was used in analyses. The ease of administration, combined with the overlap between the bulimic population for which this instrument was targeted and the study population (Gardner et al., 1990), and the availability of norms to facilitate comparison across subject groups make the BIA a useful instrument for this study.

The BIA was selected for this study because of its capacity to assess distortion of body image in a succinct manner. A high correlation between a history of childhood sexual abuse and anorexia in adulthood (Gardner et al., 1990) has been reported. The overlapping nature of these populations is further supported by the results of a study of body image conducted by Gardner and his colleagues (1990) indicating that anorectic individuals report body size distortion similar to sexually abused children.

The range of body size within which the BIA provides reliable data limits its use. Because this instrument was developed for research with a specialized population (anorectic and bulimic individuals), it was standardized on a population weighing 166 pounds or less (Williamson et al., 1989). Further investigation indicated that scores produced by women weighing over 200 pounds may be invalid. Therefore, this study has omitted scores of individuals who weigh over 185, as recommended by Williamson (personal communication, January 1997).

Human Figure Drawing Test (HFDT). (Mitchell, Trent & McArthur, 1993).

The Human Figure Drawing Test has been developed to strengthen the traditional projective approach to assessment by introducing a quantitative method of interpretation. In addition to guidelines to facilitate qualitative interpretation of drawings, a clearly delineated scoring system measures the quality of specific characteristics of the execution, including the articulation and differentiation of body details and clothing. This approach is consistent with the work of Robins and his colleagues (1991), who concluded that several aspects of the Goodenough-Harris scoring system (articulation and differentiation of body details and clothing) can reliably be measured, and that this method may be used as an independent measure of change with this population. These



aspects of drawings, and related variations, have been employed extensively in systems of scoring of human figure drawings (Howe et al., 1989). From this assessment, a quantitative measure of cognitive functioning and several scaled score indices, including overall Impairment, Distortion and Simplification, are produced. The recommended use for the latter two subscales is to clarify the general Impairment Scale.

The scoring system for the HFDT was confirmed by comparing drawings with previously established normative standards. Characteristics that discriminated between the drawings of non-patient and patient populations (including seven diagnostic categories) were identified. Interrater reliabilities of .90 to .92 for items was elicited, with a consistency of .65 to .86 obtained in the rating of the Impairment level.

The HFDT was selected for this study because of its standardized and clearly delineated system of evaluation. Unlike many systems for evaluating drawings, this instrument has been designed as part of an assessment battery for adults. This, along with its assessment of cognitive functioning and its Distortion index, make it particularly suitable for this study.

The design of this study entails characteristics that differ from the HFDT sample; therefore, the procedure was modified slightly to be consistent with those of Howe and

her colleagues (1987) in their work with sexually abused individuals. The directions given for drawings request two drawings of self: one as a child and a second as an adult. Additionally, the population of this study is entirely female. Therefore, the standard scoring protocol has been modified slightly by omitting inapplicable items.

Dissociative Experiences Scale (DES). (Bernstein & Putnam, 1986).

This 28 item screening questionnaire was developed to identify traumatized patients and has been used to assess the extent of dissociative experience across a psychiatric population. Consistent and stable scores discriminating effectively between individuals with and without a clinical diagnosis of dissociative disorder (test-retest reliability coefficient = .84,  $p < .0001$ ,  $n = 26$ ; split-half reliability between .71 and .91,  $p < .01$ , divided by diagnostic category); discriminative validity ( $X = 93.57$ ,  $n = 192$ ,  $df = 7$ ,  $p < .0001$ ) and construct validity (median = .64,  $r = .50$  to  $.79$ ,  $df = 7.189$ ,  $p < .01$ ) make the DES an appropriate measure for this study.

Symptom Checklist-90 - Revised (SCL-90-R). (Derogatis, 1983).

The SCL-90-R is a self-report scale that provides a global measure of distress. According to Kreibick (1992), the instrument is most appropriately used to identify a single factor of "degree of emotional distress" or "general maladjustment" (Kreibick, 1992, p. 130). This measure has

been used extensively in research studies, including those exploring long term effects of sexual victimization in childhood (Kreibick, 1992). Adequate ratings of internal consistency (.77 - .90) and test-retest reliability (.78-.90), coupled with its extensive empirical application, including with similar populations (Alexander, Neimeyer & Follette, 1989; Follette et al., 1991) make it a useful tool for this study.

### Raters

Pairs of independent raters were used to score the HFDT and the Assessment of Coping Scale. For the HFDT, two females, selected for their knowledge of child development and clinical theory, scored each drawing according to the HFDT system. Rater 1 is a Psy.D. student (ABD) with an art background. Rater 2 has an M.Ed., teaches Child Development at Keene State College, and is employed as an elementary guidance counselor. Raters were blind to subject groups and the specific nature of the study. Individual training in the use of the HFDT scoring guidelines and protocol was conducted prior to rating, and clarification of scoring instructions was provided during the scoring process. Rater scores for each subject were averaged and scaled.

The raters selected for the Assessment of Coping Scale each possessed an academic and professional background in human services. Two females, the researcher and a B.A. level social worker, rated each interview on eight

identified dimensions. The second rater was blind to the specific nature of the study. Individual training in the use of the Assessment of Coping Interview scoring system and guidelines was conducted prior to rating, and clarification of scoring instructions was provided at intervals during the scoring process. In general, the researcher's ratings were in the same direction, but slightly lower than those of the other rater. Because interrater reliabilities for this measure were weak, the scores of a single rater were used. Based upon the greater theoretical understanding and clinical experience in relevant areas, the rating of the author was used for analyses.

#### Procedure

For data collection, each participant received an individual appointment time and was advised to allow 1-1/2 to 2 hours to complete the process. Participants were allowed to select a time and location that accommodated their needs. The author met with each woman.

The standard procedure for data collection entailed three main components: a brief introduction, including an explanation of the demands, risks, resources of the study, and signing of the consent form (Appendix C), completion of the five questionnaires, and a taped interview, with the Human Figure Drawing Test embedded in the format. Participants were informed that they could request a break at any time during the process. Occasionally, the standard

procedure was modified to accommodate specific circumstances by dividing the session into two segments (questionnaires and interview), or providing questionnaires to be completed in advance of the interview (when distance was problematic).

The questionnaires were presented and completed in the following order: the Relevant Variable Questionnaire, the SCL-90-R, the AECOM Coping Scale, the Dissociative Experiences Scale and the Body Image Assessment. Written instructions accompanying each questionnaire were read to participants prior to completion of the measure, with particular attention to unique characteristics of each measure. For the BIA, the woman was given a first sheet and instructed to "circle the figure that most accurately depicts your current body size, as you perceive it to be. Please be honest. You may choose only one." A second sheet was then presented with the following instructions: "Circle the figure that most accurately depicts the body size you would most prefer. Again, please be honest." Height and weight, requested on the Relevant Variable Questionnaire, were verified at the completion of the questionnaires, using a tape measure and portable, Healthometer scale. Women were weighed and measured in usual street clothes.

The second half of the session was comprised of the Assessment of Coping Interview and administration of the HFDT. Participants were told, "Now, I want to learn about your experiences. My part of the interview is structured so

it is the same for everybody, but you may tell me as much or as little about these things as you choose. Do you have any questions before we start?" The structured interview was administered to all participants, with interview questions relating specifically to experiences of abuse omitted for individuals in the comparison group. The HFDT was introduced at the completion of the first half of the interview, relating to childhood experience, and again at the end of the second section, relating to adult experience.

Instructions followed the standard procedure recommended in the HFDT manual (Mitchell et al., 1993), with minor variations to accommodate the particular focus of this study. Individuals were given a pencil with eraser and a piece of blank paper with instructions at the top, and told "Now, please draw a picture of yourself as a child/adult. Please draw your whole self, not just your head and shoulders. Please do not draw a stick figure." No time limit was imposed; when finished, participants were asked "Do you want to tell me anything about this drawing?"

#### Risks.

It was anticipated that the inconvenience associated with participation in this study would be limited to the amount of time and effort a participant required to complete the interview and questionnaires, and to the potential arousal of associated emotional material. At the time of data collection, participants were provided with the names

and phone numbers of Laura Brown, M.A. and Glenn Shean, Ph.D., who were available to respond to any requests for assistance precipitated by participation in this study. In each collection location, back-up clinical assistance (Appendix C) was identified to accommodate referrals resulting from any difficulty which could not be sufficiently addressed through a single contact. No participant initiated contact beyond her data collection session, except to facilitate the referral of another individual.

## RESULTS

The results of the statistical analyses used in this study are presented in the following section. After a brief summary of outcomes, interrater reliabilities for two measures, the Assessment of Coping Interview and the HFDT, are presented. Next, the results of analyses evaluating each of the hypotheses are detailed.

Analyses supported hypotheses of this study; results related to each hypothesis are presented in detail below. Predictions related to the first hypothesis stated that women reportedly experiencing incest would show greater body distortion than reportedly non-abused women. Significant differences found between Group 1 and 2 on a measure of body image (BIA-CBS) supported this prediction. The premise of the second hypothesis, that women experiencing incest will manifest coping styles dominated by less advanced coping strategies, including dissociation, was supported. Significant effects indicated that the AECOM Replacement Scale significantly differentiated between Groups 1 and 2, in the directions predicted. Preliminary support was also found for the third hypothesis, stating that there exists a demonstrable relationship between women's preferred coping styles and amount of body image distortion, such that greater body distortion was associated with increased use of earlier coping strategies. A significant correlation between coping strategies (DES and AECOM Scales) and body



measures (BIA-CBS) and HFDT (Impairment Scale) was found.

### Reliability

Interrater correlations were calculated for each item of the Assessment of Coping Interview, child and adult segments, and for the HFDT Impairment Scale, child and adult drawing scores.

#### Assessment of Coping Interview.

Interrater reliabilities for the Assessment of Coping Interview (Pearson Product Moment), presented in Table 2, showed low to moderate agreement (.35-.57) for most items, except Item 2, where higher correlations were found. Because of the limits of agreement on other items, only Item 2 was used in analyses.

Table 2.

#### Interrater Reliabilities

Measure	Child		Adult	
	Pearson Product Moment			
	<u>r</u>	<u>n</u>	<u>r</u>	<u>n</u>
<u>Human Figure Drawing Test</u>		44		44
Impairment Scale	.86**		.75**	
Distortion Scale	.69**		.60**	
Simplification Scale	.68**		.67**	
<u>Assessment of Coping Interview</u>				
Item 1-Relational Centrality	.35	43	-.09	41
Item 2-Physical Activity	.86**	41	.61**	41
Item 3-Realistic Appraisal	.57**	41	.36**	31
Item 4-Understanding/ Integration	-.01	37	.21	43

\*\*p<.01

#### Human Figure Drawing Test.

On the HFDT, Interrater agreement (Pearson Product

Moment), presented in Table 2, was good for the overall Impairment Scale, and moderate for Distortion and Simplification Scales.

#### Missing data

The BIA provided normative data for adult women weighing between 91 and 180 pounds, with heights from 60 to 71 inches. Women whose weight and/or height fell outside of these parameters (n=9; Group 1 n=5, Group 2 n=4) were omitted from this measure. Items omitted on the AECOM Scales resulted in the omission of 11 specific scaled scores. Missing data (n=22) resulted from incomplete responses or technical error on the Assessment of Coping Interview. In the calculation of canonical correlations, missing data in the BIA-CBS, AECOM Scales and Assessment of Coping items was replaced with the mean of each variable, in order to permit calculation. Missing data were omitted from the calculation of t-tests and MANOVA.

#### Hypotheses

##### Hypothesis 1.

It was predicted that Group 1 (reportedly incested) would show greater body distortion than reportedly non-abused women, and that those women whose abuse involved force would show greater body distortion than those who did not experience the use of force. Two-tailed t-tests were used in the analysis of group differences in measures of body image and coping. The means and standard deviations

for Body Image Scales are reported in Table 3. Group 1 produced significantly higher scores ( $t=2.69$ ,  $df=33$ ,  $p<.01$ ,  $n=35$ ) on the BIA-CBS measure of body perception and the HFDT Impairment Scale, child drawing ( $t=2.61$ ,  $df=42$ ,  $p<.013$ ,  $n=44$ ). No significant differences were found between groups on the adult drawing of the HFDT Impairment Scale ( $t=-.10$ ,  $df=42$ ,  $p<.92$ ,  $n=44$ ) or the Distortion and Simplification Scales, using child and adult drawings. Further analysis

Table 3.

Body Image Scales

Group	Incest Reported (1)		n	Comparison (2)		n
BIA(CBS) **			17			18
Mean	60.12			49.11		
SD	14.72			8.95		
HFDT	Child*	Adult	22	Child	Adult	22
Impairment						
Mean	57.50	57.00		53.73	57.14	
SD	5.69	4.02		3.71	4.61	
Distortion						
Mean	51.68	52.46		50.09	51.55	
SD	4.87	4.13		3.94	4.30	
Simplification						
Mean	54.55	54.91		53.05	54.59	
SD	5.76	4.88		3.30	3.76	
	Child n	Adult n		Child n	Adult n	
Assessment of Coping Interview						
Physical Activity	20	21		19	20	
Mean	2.52**	2.28		3.58	2.32	
SD	1.18	.92		.61	1.04	
Percentage	59.1% <sub>&gt;3</sub>	36.4% <sub>&gt;3</sub>		90.9% <sub>&gt;3</sub>	50.0% <sub>&gt;3</sub>	

\*\* $p<.01$

\* $p<.05$

indicated a significant correlation (Pearson's Product Moment) between the Impairment Scale scores derived from the

child and adult drawings ( $r=.58$ ,  $p<.0001$ ,  $n=44$ ).

Further analysis (two-tailed t-test) did not support the prediction that abuse with force would be associated with greater body distortion on the BIA-CBS ( $t=1.20$ ,  $df=15$ ,  $p<.25$ ,  $n=17$ ) or HFDT adult ( $t=.51$ ,  $df=20$ ,  $p<.62$ ,  $n=22$ ) or child ( $t=.28$ ,  $df=20$ ,  $p<.78$ ,  $n=22$ ), as indicated in Table 4.

Table 4.

Group	<u>Reported Physical Force</u> <u>Body Image Scales</u>					
	Physical force			No physical force		
			<u>n</u>			<u>n</u>
BIA(CBS)			13			4
<u>Mean</u>	62.46			52.50		
<u>SD</u>	14.80			13.33		
HFDT	Child	Adult	15	Child	Adult	7
Impairment						
<u>Mean</u>	57.47	57.00		57.57	57.00	
<u>SD</u>	6.28	4.02		4.61	4.36	
Distortion						
<u>Mean</u>	51.27	52.87		52.57	51.57	
<u>SD</u>	5.11	4.02		4.58	4.54	
Simplification						
<u>Mean</u>	55.13	55.67		53.29	53.29	
<u>SD</u>	6.72	5.50		2.87	2.87	
Assessment of Coping Interview:			13/14			7
Physical Activity						
<u>Mean</u>	2.43	2.19		2.71	2.49	
<u>SD</u>	1.17	.92		1.25	.96	
<u>Percentage</u>	46.6% <sub>&gt;3</sub>	33.4% <sub>&gt;3</sub>		85.7% <sub>&gt;3</sub>	42.9% <sub>&gt;3</sub>	

Group 1 and Group 2 were also significantly differentiated on the SCL-90-R (two-tailed t-test), a general measure of coping, with Group 1 obtaining significantly higher scores ( $t=3.05$ ,  $df=42$ ,  $p<.03$ ,  $n=44$ ). Results of Coping Scales are reported in Table 5.

Table 5.

Coping Scales

Group	Incest Reported (1)	n	Comparison (2)	n
SCL-90-R*		22		22
Mean	1.28		.69	
SD	.71		.55	
DES		22		22
Mean	24.32		17.73	
Median	22.00		17.00	
SD	13.87		9.43	
AECOM Scale		22		22
Minimization				
Mean	40.71		43.09	
SD	17.02		13.83	
Suppression				
Mean	48.65		44.73	
SD	18.43		15.84	
Seeking				
Succorance				
Mean	54.27		55.10	
SD	15.30		12.58	
Replacement*				
Mean	43.67		55.16	
SD	12.79		17.71	
Blame				
Mean	41.67		36.95	
SD	17.64		12.23	
Substitution				
Mean	56.35		50.27	
SD	12.73		14.71	
Mapping				
Mean	55.00		52.14	
SD	13.44		13.95	
Reversal				
Mean	47.70		53.09	
SD	15.01		14.05	

\*p&lt;.05

The elevated level of general distress found in Group 1, as measured by the SCL-90-R, suggested further analyses exploring associations between this measure and other measures of coping and of body image (MANOVA). Scores of

the independent variable SCL-90-R were divided into two groups (median=.915, n=22). A significant relationship (Wilks Lambda  $F=4.03$ ,  $df=9$ ,  $p<.0001$ ,  $n=44$ ) between the SCL-90-R score groups and the dependent variables of coping (DES and AECOM Scales) was found. Roy-Bargman Step-down F-tests indicated significant group differences in the use of the Blame coping style ( $F=20.03$ ,  $df=1$ ,  $p<.0001$ ,  $n=44$ ), such that higher levels of general distress (high score group) were associated with a greater inclination to attribute circumstances to external events (blame). No significant group difference was found with other coping variables, and the SCL-90-R was not found to discriminate significantly (Wilks Lambda  $F=.09$ ,  $df=5$ ,  $p<.99$ ,  $n=44$ ) between the measures of body image (BIA-CBS, HFDT child and adult drawings, and Assessment of Coping Interview, Item 2, Physical activity, childhood and adulthood).

### Hypothesis 2.

The second hypothesis maintained that reported childhood incest is associated with patterns of coping in adulthood, such that Group 1 would manifest coping styles dominated by less advanced coping strategies, including denial and dissociation, to a greater extent than reportedly non-abused individuals. In the analysis of coping strategies (MANOVA), the independent variable of the presence or absence of reported incest (Group 1 and Group 2, respectively) was examined in relation to coping measures

(AECOM and DES) as dependent variables. The results indicated significant effects (Wilks Lambda  $F=3.09$ ,  $df=9$ ,  $p<.012$ ,  $n=44$ ) consistent with the hypothesis. Further analysis (Roy-Bargman Stepdown F-tests) indicated that the AECOM Replacement Scale most strongly differentiated between groups ( $F=7.13$ ,  $df=1$ ,  $p<.012$ ,  $n=44$ ), with Group 2 obtaining higher scores; the DES also contributed significantly ( $F=5.90$ ,  $df=1$ ,  $p<.021$ ,  $n=44$ ) to the model, with Group 1 producing higher scores.

A corollary to the second hypothesis predicted that the reported age of onset of incest would be associated with a preference for certain coping approaches, such that more primitive coping strategies (as measured by the DES and AECOM) would be associated with a younger reported onset. A second corollary hypothesis stated that when abuse involved force, less relational centrality and physical activity would be expected. Further analysis (MANOVA) did not find any significant effect (Wilks Lambda  $F=1.54$ ,  $df=9$ ,  $p<.24$ ,  $n=22$ ) for the reported age of onset of incest and the dependent variables (AECOM Scales and DES).

Analysis of differences (MANOVA) within the total sample ( $n=44$ ) was conducted with the independent variable of presence or absence of incest (Groups 1 and 2, respectively) and the dependent variables of physical activity reported in childhood and in adulthood, to support the second corollary hypothesis. A significant difference between groups was

found (Wilks Lambda  $F=7.32$ ,  $df=2$ ,  $p<.002$ ,  $n=44$ ); Roy-Bargman Step-down  $F$  tests indicated an inverse relationship ( $F=14.07$ ,  $df=1$ ,  $p<.001$ ,  $n=44$ ) between a reported history of incest and the level of physical activity in childhood. Further analysis (MANOVA) also examined the relationship between the independent variable of presence of force and the dependent variables of physical activity, childhood and physical activity, adulthood (Assessment of Coping Interview, Item 2). No significant difference between groups was reflected in the level of physical activity reported in childhood or adulthood (Wilks Lambda  $F=.36$ ,  $df=2$ ,  $p<.70$ ,  $n=22$ ). Results associated with reported physical force in conjunction with incest are presented in Table 4.

### Hypothesis 3.

Finally, it was hypothesized that there exists a demonstrable relationship between individuals' preferred coping styles and amount of body image distortion, such that less body distortion would be associated with more advanced cognitive coping strategies and the primary use of more primitive coping strategies will correspond to greater body distortion. Canonical correlations were used to analyze the relationships among the set of coping variables (DES and AECOM Scales) and body image variables (BIA-CBS, HFDT, and Assessment of Coping Interview Item 2). It is necessary to consider the results of statistical analysis of the data



associated with the third hypothesis as preliminary, due to inadequate subject size. Given this caution, a significant overall effect (Wilks Lambda  $F=1.92$ ,  $df=27$ ,  $p<.012$ ,  $n=44$ ) between coping strategies (DES and AECOM Scales) and body measures ((BIA-CBS) and HFDT, child and adult drawing scores, Impairment Scale). Further analysis (univariate  $F$ -tests) indicated that the BIA-CBS was associated with coping strategies ( $F=2.76$ ,  $df=9$ ,  $p<.015$ ,  $n=44$ ). Three specific scales were found to be significantly related (regression analysis) to the BIA-CBS: the AECOM Substitution Scale ( $t=3.70$ ,  $p<.001$ ,  $n=44$ ), the AECOM Replacement Scale ( $t=-3.31$ ,  $p<.002$ ,  $n=44$ ), and the DES ( $t=-2.11$ ,  $p<.042$ ,  $n=44$ ). After the effects of the BIA-CBS were removed, no other body image variable contributed significantly.

## DISCUSSION

### Introduction

Compared to individuals with no history of abuse, those with reported childhood incest experience show significant differences in related aspects of their body image and coping styles. Mixed support was found for each of the hypotheses of this study. As expected in the first hypothesis, individuals reportedly experiencing incest manifested greater body image distortion than non-abused individuals. However, contrary to expectation, body image distortion was no greater in individuals whose reported incest was associated with physical force.

The second hypothesis also was partially supported. Reported childhood incest was found to be associated with some patterns of coping in adulthood. As anticipated, individuals reportedly experiencing incest manifested a greater use of dissociation. However, coping patterns of this group were not dominated by coping styles associated with more primitive defenses, such as denial. Conversely, individuals with no reported incest history showed greater preference for the more advanced Replacement coping style, compared to abused individuals. The hypothesis that a reportedly earlier onset of incest would be associated with significant differences in coping strategies was not supported. Investigation of the last component of the second hypothesis was limited by low interrater

reliabilities on Item 1 (relational centrality) of the Assessment of Coping Interview. The hypothesis that physical force in conjunction with reported incest would be associated with diminished physical activity was not supported.

It is necessary to consider the exploration of the third hypothesis as a preliminary view, to be interpreted with caution, based on the limited sample size used in this study. Partial support was found for this hypothesis, postulating a relationship between preferred coping styles and body image. As hypothesized, less distortion of body image was found to be related to greater use of the Replacement coping style, which corresponds to the relatively advanced, cognitive defense of compensation. An expected association between the use of dissociation and greater body image distortion was found, in the direction opposite of that predicted. That is, greater body image distortion corresponded to less use of dissociation. Greater preference for the Substitution coping style, which corresponds to the relatively early defense of displacement, was also associated with greater body image distortion. Poor interrater reliabilities on several of the Assessment of Coping Interview items prevented further exploration of the association between body image and self-reflection.

## Interrater Reliabilities

### Assessment of Coping Interview.

The Assessment of Coping Interview presented scoring difficulties resulting in weak interrater agreement, prohibiting use of all but one item. Pearson's Product Moment was determined to be the most appropriate measure of correlation for the interview, whose scoring guidelines were both categorical and continuous. The scoring system was based on an approach used in studies of resiliency, stress, and trauma (Beardslee & Podorefsky, 1988). Four items corresponding to characteristics associated with resiliency were identified and described. Each item rating defined a level of involvement within the specific quality (for example, avoids physical activity; physical activity constitutes a major portion of experience). These levels were arranged hierarchically into a Likert-like scale. The qualities being measured, such as the extent to which physical activity played a role in an individual's life, are essentially continuous; therefore, in this instance, the groupings are necessarily somewhat arbitrary.

Moderate to strong agreement between raters on both the child and adult portions of Item 2, Physical Activity was found. This was the most concrete dimension measured in the interview. The clarity of both the concept and the interview questions addressing it accounts for its acceptable interrater agreement. In contrast, Item 3,

Realistic Appraisal, was another relatively concrete item that showed low correlations. It is likely that the moderately low agreement found on this item reflects either a lack of clarity in the definition of perspective being measured, or raters' different use of interview data to draw inferences.

Item 4, Understanding/Integration, was a particularly ambiguous item on the interview, requiring a fair amount of rater interpretation. The moderately low agreement found in the adult portion suggests that further clarification of the scoring guidelines would be helpful. Unlike other items, no specific questions addressed this area in the childhood portion of the interview. Therefore, it was necessary for raters to glean individuals' levels of processing of their experiences from other indicators. Raters' disagreement regarding the scoring of this item suggests that the interview needs to be modified.

Moderately low agreement was also found on the child portion of Item 1, Relational Centrality, and raters disagreed slightly on the scoring of the adult portion. The thorough coverage of relational involvement, including in adulthood, in the interview suggests that further rater training is indicated.

Several conditions contributed to difficult and imprecise scoring of the Assessment of Coping Interview. First, the Interview was ambiguous by design. Relevant data

were extracted from tapes covering a spectrum of material influenced by individuals' interests and concerns. This introduced a strong potential for interpretive variation. Second, despite training, the interpretation of the descriptions provided in the specific guidelines for scoring each item remained unavoidably subjective. The transformation of qualitative data to quantitative scales requires a high level of conceptual and perceptual agreement between raters. In his exploration of resilient youth, William Beardslee and his colleagues (Beardslee & Podorefsky, 1988; Beardslee, Klerman, Keller, Lavori, & Podorefsky, 1985) conducted studies incorporating structured interviews eliciting participants' perspectives in conjunction with objective measures. In one case, interviews were rated by the interviewer/associate and senior researcher; in the other, assessments were conducted by the same pair.

In this study, a significant discrepancy in the levels of conceptual understanding between raters existed. As in the work of Beardslee and his colleagues (1988; 1985), the author served as first rater. A second rater who shared the author's specific interest and understanding of relevant theories could not be found because of the large time commitment required for the scoring task. In fact, the second rater was not specifically familiar with the current child development, attachment, and traumatic response

theories upon which this study is based.

The second rater was trained to understand the definition of each item (e.g. Relational Centrality, Physical Activity, etc.) and the ascribed levels, as described in the scoring system. Ongoing clarification was provided at intervals during the rating process. Interrater agreement could be improved by more extensive training of raters. This would include a review of relevant theoretical premises and a clarification of scoring guidelines, using specific examples from the interview tapes.

#### Human Figure Drawing Test.

The HFDT produces three continuous, scaled scores that were rated by two independent raters; therefore, Pearson's Product Moment was selected to assess interrater agreement for this measure. Although raters complained that the scoring instructions at times were ambiguous or incomplete (e.g., although scoring was described for "hands", "no hands", "hands in pockets", and "hands behind the back", the manual made no mention of how to score one hand visible and one hand behind the back), the sound agreement between raters on the Impairment Scale indicates adequate consistency in ratings. The lower agreement found on the Distortion and Simplification subscales supports the contention of Mitchell and his colleagues (1993) that these scales are most effectively used to modify the overall Impairment Scale. The author's decision to focus primarily

upon the results of the Impairment Scale is based upon these recommendations and the interrater agreement obtained in this study.

The correlation between the HFDT child and adult drawings was calculated in order to discern if child and adult scores reflected different experiences. Definitive inferences cannot be drawn from these correlations because test-retest reliabilities for this instrument are not available. However, the moderate correlation between child and adult drawings was consistent with results of Burgess' study (1988), indicating some distinction between the drawings of younger and current self.

#### Group differences

Results indicated that women with a reported history of incest experienced a greater level of general distress, had greater distortion of body image, and were less inclined to use the coping style of Replacement than women with no reported abuse. There was also evidence that women with reported histories of incest experienced slightly less physical activity and more impairment in cognitive functioning during childhood than women with no reported abuse history. These latter differences were not evident in measures of adulthood experience.

Subject selection factors may have affected the measurement of group differences. An apparent difference was noted in the level of motivation participants exhibited



in response to recruitment. Individuals reporting an incest history tended to respond more readily and often identified personal motives for participating. In contrast, the response of individuals reporting no history of abuse was sparse, such that more extensive recruitment efforts were required to complete Group 2. Individuals were recruited from several sources, including self-help groups and undergraduate continuing education students at a state college. Between-group comparisons on several measures, including the SCL-90-R and the DES, show the impact of a disproportionate number of younger subjects (college students) in Group 2 (60%). Studies indicate that normal adolescents tend to produce moderately high scores on the DES, and college students show a "high prevalence of dissociation and derealization" (Bernstein & Putnam, 1986, p.732). In this study, the median score on the DES of women less than 25 years of age, 87% of whom reported no history of incest, was slightly lower than that reported for adolescents (Bernstein & Putnam, 1986) and higher than expected scores for non-patient adults. A further consideration is the affect of age on the results of the BIA-CBS. Research with the BIA-CBS was not available regarding this topic. Evidence suggests that body image tends to stabilize in late childhood (Witkin, 1950); however, further study of changes in body image in adulthood from a developmental perspective, both in general and

sexually abused populations, is strongly indicated.

A second sampling limitation may be indicated. The elevated level of general distress and dissociation suggests that Group 1 may constitute a clinical population, whereas Group 2 does not. Although participants were drawn from several sources, self-selection may have influenced the final participant group for this study. Additionally, although therapeutic avenues of recruitment were not specifically targeted, many self-help groups were associated with other mental health services. Despite these cautionary considerations, these results are consistent with numerous studies (Cole & Putnam, 1992; Goodwin, 1989; Coons et al., 1989; Gelinas, 1983) associating a history of incest with greater clinical problems. In order to further explore the nature of the sample used, participants' SCL-90-R scores were examined in relation to the other coping and body image measures used in this study. Scores on the SCL-90-R were related to the AECOM coping scale of Blame, indicating that a greater level of general distress was associated with a preference for use of blame as a style of coping. This is consistent with studies with the AECOM Coping Scales that suggested that Blame showed low efficacy for promoting psychological well-being (Plutckik & Conte, 1989). No other variable, including dissociation (DES) and body image distortion (BIA-CBS) was associated with a difference in levels on the SCL-90-R. This suggests that differences in

subject groups are not solely attributable to differences between clinical and non-clinical populations, but reflect the multifaceted and complex characteristics associated with participants in a study of incest.

Scores of Group 2 on the HFDT were also slightly elevated, compared to the expected scores of non-patient adults. This again may reflect the disproportionate number of post-adolescent participants in the comparison group. Evidence suggests that puberty brings changes in body image (Fisher, 1986); pubescent adolescents manifest greater body distortion and less differentiated body boundaries than post-pubescent adolescents (Harrison, 1975, cited in Fisher, 1986). Although a continuation into adulthood of Harrison's study was not available, it can be speculated that the shift in body image from post-adolescence to adulthood may occur gradually, such that younger adults manifest more distortion of body image than do more mature adults.

On the SCL-90R, expected norms for adolescent non-patients are higher than those of adult non-patients, but lower than adult out-patient populations (Derogotis, 1977). The results of the SCL-90-R indicate that individuals with a reported history of incest experience a significantly higher level of distress than those with no reported incest history. Comparison with normative samples suggests that scores produced by Group 1 were found to be consistent with those expected in an out-patient population, while Group 2

produced scores most similar to those found in adolescent non-patients.

A distinction in the level of functioning between groups also was found in a more specific measure of body image.

#### Hypothesis 1.

The premise that childhood incest is associated with disruption of body integration is supported by the results of this study. Results of the BIA-CBS indicated that individuals with a reported history of childhood incest manifested significantly greater distortion of body image than did those with no reported abuse background, perceiving their body size to be significantly larger, relative to height and weight.

Evidence suggests that all children normally tend to overestimate their body size, including non-abused, physically abused, and sexually abused individuals (Gardner et al., 1990). In general, the pattern of adults' estimations of body parts are similar to those of children (Koff & Kiekhofer, 1978). However, adults show a tendency to underestimate size. Therefore, the reported tendency for adults to overestimate their body size is developmentally unusual.

In this study, women reporting incest showed patterns of body image perception in adulthood that are similar to those normally expected in children. Several ways of

understanding this phenomenon have been proposed. According to psychodynamic theory, body ego, constructed from sensation and perception, constitutes the first mechanism mediating between individual and environment (Ford, 1994). Body schema develops in childhood, through social and environmental interaction (Wallon & Lang, 1989), becoming increasingly organized and differentiated. Distortion of body image beyond the expected developmental level suggests that the usual process of integration of body experience into cohesive identity has not been achieved or has been disrupted. Such a disturbance reflects a limitation in the apparatus of integration or injury to the self and its organization.

The results of this study associate incest with interference in the organization of body image. The experience of incest may change the way an individual perceives her body, and/or may change her inclination to respond to this perception (Gardner, 1991). Schilder's (1950) contention that pain impacts on body image, such that size is distorted, also suggests further consideration of the results of this study.

Distortion of body size also suggests a lack of awareness of physical boundaries to the extent that the accuracy of an individual's perception is affected. Research (Fisher, 1986) suggests that this lack of awareness is likely to be accompanied by less defined concepts of self

and self-confidence. This perspective also is consistent with Liebetrau and Pienaar's (1974) research of children's body boundaries. According to this study, by age 8 (but not before), highly adjusted children showed greater awareness of body boundaries than less well adjusted children. Further, highly adjusted children experienced an increase in their awareness of body boundaries at this age that was not replicated in less well adjusted children. This suggests that children with low levels of adjustment, such as have been associated with childhood incest, experience an interference (retardation or regression) in their awareness of body boundaries. Further, studies exploring the estimation of body size, both as a whole (Gardner et al., 1991) and in relation to parts (Koff & Kiekhofer, 1978) suggest that the tendency toward less awareness of body boundaries may continue as a cognitive pattern into adulthood. This supports the premise that, in normal development, body image comes to reflect more of a cognitive than perceptual process, essentially influenced by physical and emotional experience.

The cognitive foundation of body image is addressed in the HFDT (Mitchell et al., 1993), which assesses levels of cognitive functioning based on an individual's graphic portrayal of self. On this measure, the Impairment Scale represents an overall gauge of cognitive functioning. The authors recommend that the Distortion and Simplification

Scales be used to further clarify the interpretation of the Impairment Scale, particularly when results lie between ranges, as did those in this study. No significant group differences were found in the Distortion and Simplification scales, using child and adult drawings. The low scores obtained on these scales fall within the unimpaired range of cognitive functioning and attenuate the moderate level of impairment of the Impairment Scale.

Results of the HFDT (Impairment Scale) further supported the hypothesis that greater cognitive distortion would be associated with a reported incest history. The depiction of self in childhood suggests a greater level of cognitive impairment in this group; average scores on the childhood drawing indicated a borderline, low-moderate impairment of cognitive functioning. These results are similar to those expected in a clinical population who experience "cognitive difficulties associated with functional constriction resulting from psychopathology" (Mitchell et al., 1993, p. 71). The mild elevation in this measure suggests the presence of minimum cognitive impairment which is likely to be associated with depression. This is significantly higher than the average childhood drawing scores of Group 2, which fall within the unimpaired range of cognitive functioning. The average scores of both groups on the adulthood drawing are consistent with the low-moderate level of impairment of cognitive functioning found

in the childhood drawings of Group 1.

The significantly higher HFDT Impairment scores obtained by Group 1 suggest that the order in which measures were administered by design produced the effect intended. Specifically, drawings were elicited twice during the interview process, following the childhood (child drawing) and adulthood (adult drawing) segments. In a presentation of hypnotic induction, Thompson (1992) explained that one of the easiest inductions for age regression is "remember when . . . ." In this vein, the interview, which elicited detailed descriptions of childhood experience, may have served as (approximately) a half-hour induction session, evoking childhood experience, which was conveyed not only verbally, but also in the execution of drawings. The elevated scores on the childhood drawings using the HFDT Impairment Scale suggest that individuals may have tapped that "period when acute symptoms are visible" (Howe et al., 1987, p. 39), prior to the mobilization of coping strategies. This premise is supported by the moderate correlation found between drawings in childhood and adulthood.

The configuration of HFDT scores suggest that, by adulthood, individuals in both groups experience mild levels of depression. If child drawings are understood as a reflection of childhood experience, this would suggest that individuals reportedly experiencing incest also experience



depression earlier than their non-abused colleagues. In this case, the defensive adaptation seems to contain, but not diminish, symptoms.

Physical activity.

Individuals with a reported history of incest also reported significantly less physical activity in childhood than non-abused individuals. No difference between groups was reported in adulthood. That reported incest experience also was associated with more cognitive impairment (childhood) and body image distortion and greater distress in adulthood is consistent with the premise that body image is constructed out of interaction with the environment. Differences in levels of physical activity between groups with and without reported incest backgrounds disappear in adulthood, suggesting that some trauma associated symptoms may diminish. There is no evidence that increased physical activity in adulthood is associated with improved organization of body image. Further research is indicated to explore the relationships between these variables.

This study does not support the hypothesis that physical force in conjunction with reported incest is associated with greater body distortion. Results based upon a comparison drawn from a small number of participants must be seen as inconclusive. To further explore the impact of force in relation to body image, studies comparing the discrete categories of incest, physical abuse, physical and

sexual abuse, and no abuse are needed.

Levels of general distress (SCL-90-R) were found to correlate directly with the Blame coping style and inversely with the Replacement coping style, suggesting that the use of Blame to manage stress is less effective. This is consistent with the results of other studies reported by Plutchik and Conte (1989). In contrast, a preference for the use of the cognitive coping style of Replacement is associated with lower levels of distress, or more effective coping.

No significant correlations between the SCL-90-R and the DES, nor measures associated with body image (BIA-CBS, HFDT child and adult drawings, and Assessment of Coping Interview Item 2 Physical Activity, child and adult portions) were found.

#### Hypothesis 2.

The distinction between the levels of distress experienced by reportedly incested and non-abused individuals was reiterated in some observed coping strategies. Results provided partial support for the hypothesis that women reportedly incestuously abused in childhood would manifest patterns of coping dominated by less advanced coping strategies to a greater extent than would women reporting no history of abuse. As expected, Group 1 reported significantly greater use of dissociation than did Group 2. Median scores of Group 1 are comparable

to those reported by Bernstein and Putnam (1986) for anxiety disorders (Phobic Anxiety and Agoraphobia). This is consistent with symptom patterns associated with post-traumatic stress symptoms (DSM IV, 1994) found in over half the incest survivors seeking treatment (Goodwin, 1989; Coons et al., 1989).

In the Assessment of Coping Interview, individuals described their coping experiences, including dissociation.

Five participants obtained DES scores one standard deviation or more above the mean for Group 1 (38 or more). Scores of this elevation are consistent with those found in individuals with diagnoses of Post-traumatic Stress Disorder and Dissociative Identity Disorder (MPD). Of this group, 4 women reported histories of incest (18% of Group 1). One woman who described forgetting and confusion in her childhood gave a clear picture of the dissociative process:

[I remember] seeing people talk but  
I can't hear them & recount [what they  
are saying].

However, most of this group described coping through wishes and/or fantasy. For example, one woman explained:

[I would] talk to myself. Make myself  
laugh. Play games alone in my room.  
Imagine.

It is important to note that this method of coping was only one of several, generally more active, approaches to dealing

with difficult situations described.

Eight participants obtained DES scores in the normal range. Twenty-seven percent of Group 2 and 9% of Group 1 obtained DES scores one standard deviation or more below the mean for Group 1 (10 or less). In contrast to the highly dissociative group, these individuals almost all described other people as essential to their ability to cope with difficulty:

I think my parents [helped me get through]. They're really strong and I never knew anything was wrong.

I think my Mom [helped me get through]. She was always pushing me . . . making sure I was interested in things or having things available to do.

Support, definitely from my family, [helped me get through]. They were always there to hear me out. They were my biggest fans.

I kept myself going. Talking to my friends helped . . . quick pick-me-ups like my dog [helped me get through].

The relational implication drawn from these

descriptions is consistent with Van der Kolk's (1994a) contention that attachment, rather than the incest per se, is the primary area of concern and intervention for sexually abused individuals, particularly those with long-standing symptoms. When the descriptions of highly dissociative individuals are compared with the descriptions of individuals in the normal range, they suggest that one component of resiliency, the existence of positive relationships (Beardslee, 1993) is diminished in those individuals who have dissociated in the context of incest.

This study found no difference between groups in the use of coping styles corresponding to the earliest defense functions (Minimization-denial and Blame-projection), identified by Goldwater and Duffy (1990) as prevalent in the incested population. This may reflect a phenomenon related to participants' self-selection for participation in this study. Those individuals relying primarily upon defenses of denial and projection may have been less willing to participate in a study exploring experiences associated with incest than were those with more advanced strategies of handling this material.

Although no differences in the use of coping styles associated with the most primitive defense functions were noted between groups, it was found that women with a reported history of incest were significantly less likely than those reporting no abuse, and the normal population, to

rely on the Replacement coping style. In Plutchik's model, Replacement is associated with the defense of compensation, in which an individual responds to frustration of gratification by shifting the object of gratification to another, potentially more satisfying goal. This coping style has been exemplified by the statement "if an illness or accident prevented me from doing my usual work, I would still find useful things to do" (Rim, 1991, p. 1316). This defense, with its cognitive component, is relatively advanced, developmentally.

The use of compensation may be viewed in terms of the conditions provoking the use of this ego defense, as well as to its function and consequences. The need to evoke this defense function is associated with an individual's perception of personal inadequacy that interferes with the achievement of a designated goal. Compensation functions to redirect the individual toward an alternate goal, presumably offering a greater chance of satisfaction. Research regarding the effectiveness of Replacement as a coping strategy was not available. However, this ability to pursue alternate routes toward gratification is reflected in the approaches identified by Beardslee & Podorefsky (1988) as characteristic of highly adaptive individuals.

Research has examined the use of the compensation defense function. In their study of the Life Style Index (a measure of ego defenses) of schizophrenic in-patients,

Plutchik and Conte (1989) suggested that the elevated use of compensation in this population may be associated with a greater dissatisfaction with oneself and one's ability to manage one's life. When the results of this study are examined, based upon this interpretation, evidence suggests that those individuals with a reported background of incest are likely to experience less frustration with some aspect(s) of themselves and their ability to achieve their life goals than do those with no abuse history.

Initially counterintuitive, this explanation may imply a passive acceptance of circumstances. It raises the possibility that individuals with a reported history of incest anticipate achieving satisfaction through themselves and/or events less than those with no history of abuse. To the extent that a lack of expectation of gratification occurs, individuals may be less likely to experience the type of frustration that would trigger compensation, or its conscious coping style of Replacement, and necessitate the quest for alternate routes to gratification.

This type of passive acceptance is illustrated by only one individual scoring low on the Replacement Scale ( $\leq 34$ , 1 SD below mean,  $n=4$ ):

It was kind of like I just accepted  
it. I had to accept everything else.

The remaining three individuals were inclined to attribute their coping to themselves:

I'm a tough person.

I've had a history of surviving. I  
know I can do it.

I guess I have a strong personality,  
whereas even if things get tough, I  
always could deal with it. I always  
thought I had a strength of power . . . .

Replacement also may be interpreted as an indication of flexibility, allowing an individual to shift the object of a goal to increase satisfaction. This view is supported by two of the individuals scoring high ( $\geq 66$ , 1 SD above mean,  $n=6$ ) on the Replacement Scale:

If I can't do this, I'll have to find  
a way to do something else. Life goes  
on regardless of what happens.

[When things got tough, I would] talk to  
myself, try to figure things out and try  
to figure out different ways I could be.

From this perspective, results of this study may indicate that those with a reported incest history have more difficulty exploring alternatives, or shifting the focus of their goals, than those with no history of abuse.

Several individuals scoring high on Replacement gave



clear descriptions of this coping style, while others described the process of relinquishing a problem or difficult feeling or anticipating an alternate satisfaction. One woman explained:

Faith in God [helps me get through].

He has reasons, purposes. I don't realize it yet, but [I] will be able to use my experience to help others.

This description (and others) of waiting until circumstances change may represent a component of the Replacement process.

The ability to relinquish attachment or control, in order to pursue potentially more fruitful alternatives, is necessary for the efficacy of this coping style. From the descriptions of low Replacement individuals, it appears that the balance between this process of relinquishing, or passivity, and active engagement, or control, is absent. In contrast to the low Replacement individuals who viewed themselves as their primary source of strength, half of this high Replacement Style group also stated that they talked to another person or people when dealing with a difficult situation. (In this group, high and low DES scores were evenly distributed.)

Results supported the hypothesis that the reported age of onset of incest was significantly related to a single coping approach. The reported age of onset of incest differentiated the use of dissociation at far younger than

10 years. Those individuals who reported the onset of abuse in infancy (0-2 years) produced significantly higher DES scores, consistent with those associated with Post-traumatic Stress Disorder (Bernstein & Putnam, 1986). In contrast, the scores of women whose incest reportedly began in early (2.5-5 years) and middle (5.5-8.5 years) childhood were found to be similar to those of individuals reporting Anxiety Disorders, while the scores of women reporting the onset of incest in late childhood/early teens (9-13 years) were similar to those of a normal population.

Dissociation represents a normal phase of child development occurring during the first two years of life. The language of the body is sensation and perception. Earliest experience is stored on a sensory-motor level, and subsequently, visually. Before the age of 3, children have visual images for experience/information that they do not yet have words for (Van der Kolk, 1994b). The consistently higher dissociation scores found in those women whose incest reportedly began at or before age 2 is consistent with this developmental model and supports the premise that this primitive method of information processing serves as a defensive strategy in early years. Normally, dissociation is replaced in dominance by other, more perceptually and cognitively advanced mechanisms of managing experience. However, when dissociation becomes employed as a defensive function, it tends to maintain its position of dominance in

the repertoire of self-protection, rather than being supplanted by more advanced strategies. The elevated use of dissociation found in women with a reported incest history beginning after age 2 supports the premise that this method of processing information remains available and becomes activated when the individual is confronted with experience which cannot be cognitively integrated. The characteristic symptoms of PTSD identified in the dissociative level of this group reflect those experiences for which there are no words; rather, information is stored as it was in infancy.

The corollary hypotheses that body image would be associated with the reported age of onset of incest, and that physical force in conjunction with reported incest would be associated with a pattern of less physical activity, either in childhood or adulthood, were not supported.

#### Interaction Between Body Image and Coping Styles

##### Hypothesis 3.

The third hypothesis that body image would be associated with preferred coping styles was partially supported. Body image distortion was associated with several coping strategies, including the coping styles of Substitution and Replacement, and dissociation. As anticipated, less distortion of body image was related to the use of a more advanced, cognitively based coping style, while greater body image distortion was associated with a

preference for a lower level coping style. Contrary to expectation, dissociation was inversely related to body image cohesion.

Body image and the use of Substitution were found to be inversely related to the use of Replacement and dissociation. This pattern suggests that these mechanisms are reflexive of different developmental levels. Specifically, dissociation is most strongly associated with primitive processing of experience, which is subsequently invoked in extreme situations in which experience cannot be processed through narrative channels, when knowledge of body is centered on sensation and gratification. The awareness of body image develops later, in early childhood, as does the displacement defense function associated with the Substitution coping style. As previously discussed, Replacement is associated with the defense of compensation, which emerges later still, as cognitive skills increase.

The inverse relationship found between body image distortion and dissociation was an unexpected result. Further exploration of the data (ANOVA) was performed to help clarify this interaction. Results indicated that dissociation was highest in women reporting an onset of incest in infancy (0-2 years), and significantly less subsequently. This is consistent with the developmental pattern associated with the use of dissociation. According to Van der Kolk (1994a), at different ages, "the brain does

different things to calm itself down". Dissociation and body image appear to reflect different levels of brain maturation, corresponding to different developmental levels.

During the first two years of life, when the use of dissociation is most prevalent, body image is undifferentiated. As body image becomes increasingly differentiated, from 3 to 5 years, the schema becomes more organized, and experience begins to shape the cognitive construct. Results of this study are consistent with research indicating that the use of dissociation decreases with age, and that a cognitively based construct of body, or body image, shaped through social, emotional and environmental experience, develops with age, reaching a stable level by approximately age 9 to 10 (Witkin et al., 1962).

Greater body image distortion correlated most strongly with greater use of the Substitution coping style. This conscious style of coping corresponds to the unconscious defensive function of displacement (Plutchik & Conte, 1989).

Displacement, developing at approximately 18 to 24 months of age, is one of several defensive functions charged with managing anxiety arising from failure to relinquish a parental object of attachment in the service of identification (Blanck, 1974). This defensive function is associated with somatic and phobic disorders. As a conscious coping style, Substitution refers to the

deliberate redirection of affect onto an alternate, usually regressive object of gratification. For example, in his study of coping styles of holocaust survivors, Rim (1991) exemplifies this coping style as "when I get upset, I look for something to eat" (p. 1316).

Descriptions similar to that reported by Rim (1991) were found in the Assessment of Coping Interview. Many of the women with high scores on the Substitution Scale (1 SD above the mean ( $>67$ ,  $n=7$ ) identified specific changes in their focus of gratification that they used, either currently or in the past:

[To feel better] I would eat . . .  
anything sweet, or I read. [Now]  
I go riding. I swim. I'm doing  
better with the sugar.

. . . drinking [was what I did to  
feel better]. I do whatever I need  
to do to deal with the moment or  
sometimes I just run and hide. [I]  
read, write, throw myself into  
"things to do", go to bed . . .

Most of the high Substitution group also described themselves as their primary source of strength ( $n=5$ ); only two women in this group identified relationships as an important part of their coping resources:

In the beginning I think it's always been the cook ... [and] my grandfather, who was a dependable, stalwart, steady, loving, kind, gentle person. He cared and I think those two people were obviously enough to survive.

When I was in the orphanage they had this picture on one wall of this guy they called God and he had all these kids around him. I thought, here's one grownup who knows what he's doing because he likes kids, and the nuns in that place, they were really wonderful.

In comparison, a few ( $n=2$ ) of the low Substitution individuals (1 SD below mean,  $\leq 39$ ,  $n=6$ ) also identified themselves as their primary source of strength, while each individual in this group described other relationships as an important resource in her coping:

My sister, 'cuz I saw I wasn't the only one, she was going through this with me. Thinking out there were other people from abusive homes.

[I] remember my grandfather, talking about my grandmother. He shared the

loss, comforted me, my parents just comforted me.

Confiding in two of my closest friends and actually one of my friends' moms [helped me get through when things were tough]. Knowing I have personal resources to go out and meet people and get what I want [helped].

One third of the low Substitution group also described using Substitution types of coping strategies, involving physical exercise, while the remainder described a range of other coping strategies employed. Gender may be a factor in the preferred use of coping styles. In his study involving holocaust survivors, Rim (1991) found that females obtained significantly higher scores than males on the Substitution coping style.

The correlation between BIA-CBS and the Substitution coping style suggests that these aspects of the self, body image and a specific defensive ego function may share a common operating level. This study suggests that reportedly incested individuals may have experienced greater injury to the self than have non-abused individuals, as indicated by the elevated level of body distortion within this group. Further, it is speculated that this reflects damage sustained at the level of body organization. It is also feasible that the increased body distortion reflects a



regressive process. This injury to the organization of the self is manifest in a limitation of development or use of cognitive skills necessary for the successful implementation of more advanced coping styles. Incest may interfere with the mobilization of those resources necessary to facilitate development of more advanced ego functions, such as higher level, cognitive defenses and coping styles.

Compared with individuals reporting no background of abuse, significantly fewer individuals with a reported history of incest relied upon the advanced coping style of Replacement, and more upon the earlier Substitution approach. This suggests that incest may increase the reliance on familiar coping styles to the detriment of the development of more advanced strategies. This over-reliance on earlier defense strategies may interfere with the development of more advanced cognitive abilities, employed in the more advanced defensive functions and coping styles.

Groups of defenses employ different mechanisms to fulfill their common function of managing conflict, reducing frustration, and increasing the chance for gratification of needs. The coping styles of Substitution and Replacement, which distinguish individuals with high and low levels of body distortion, share a common approach to this task. Like the defensive functions of displacement, compensation and sublimation, these coping styles alter the source of gratification in some way. The results of this study

suggest that body distortion is associated with the level and manner in which reality is changed. From this study, it appears that those with greater body distortion are more likely to plug in concrete, available replacement objects and to rely on it/them habitually. This is consistent with the high level of eating disorders identified in sexually abused individuals. In contrast, the predominance of non-abused individuals with less body distortion tend to employ cognitive strategies, such as exploring alternatives, to shift the focus of their goals.

## CONCLUSION

This study addressed questions associated with the high prevalence of sexual abuse history in women, and particularly with women involved in treatment. Through a comparison of the perceptions and experience of women with and without a reported background of childhood incest, within a developmental framework, it examines whether an intrusive violation to the body and emotions, such as incest, is associated with changes in body image, coping patterns, and the relationship between these factors. Significant between-groups differences indicated that individuals reporting incest were characterized by greater general distress, increased body image distortion, and greater use of dissociation, compared to non-abused subjects. Individuals reporting incest also exhibited differences related to body image in childhood, including less physical activity and mild cognitive impairment, reflected in drawings of self. Additionally, preliminary exploration indicated an interaction between body image and coping styles, such that individuals with greater body distortion showed preference for a less advanced coping style (Substitution), while those with less body distortion and/or no history of incest manifested a preference for an advanced, cognitively based coping style (Replacement). Physical force in conjunction with incest was not associated with differences in body image distortion or coping

patterns. These results suggest several avenues for further research of clinical intervention with individuals with a history of incest, including attachment and body-based interventions in childhood and/or adulthood.

#### Implications for Further Research

The experience of individuals reporting a history of childhood incest is associated with greater general distress, greater body distortion, and greater dissociation in adulthood. There is indication that this violation of body and self also is accompanied by less physical activity and mild cognitive impairment in childhood. Further, individuals with greater body distortion showed preference for a coping style relying upon a concrete and often regressive exchange of goal object (Substitution), while those with less body distortion and/or no reported history of abuse manifested a significant preference for a cognitively based coping style that transfers the search for gratification to an essentially equivalent, alternative goal object (Replacement).

The need for theoretically based therapeutic interventions addressing specific areas of difficulty associated with a history of sexual abuse and/or incest has been repeatedly identified (Cole & Putnam, 1992). Further research investigating the use of therapeutic interventions related to attachment, body image, and cognitive skills is indicated by the results of this study.

### Attachment.

Relationships have been found to be a protective factor mitigating stress and trauma (Rutter, 1985). In this study, descriptions of reliance upon interpersonal relationships distinguished the comparison group from those with a reported history of childhood incest. This is consistent with Van der Kolk's (1994a) premise that attachment, rather than incest trauma per se, is the primary area of disturbance and therefore needs to be the main focus of treatment. The context of a secure attachment is essential to any specific therapeutic work addressing sexual abuse. Therefore, the attachment history of the client is likely to be at least as important as the specifics of sexual abuse endured. A study comparing therapeutic interventions targeting attachment and issue-based content is indicated. The preliminary results of this study suggest attachment may be associated with the selection of coping styles. Further investigation into this relationship is indicated.

### Children.

In order to maximize the potential for successful current and adulthood functioning, interventions with incested children need to bolster normal developmental processes and enhance coping resources. The best predictors of later functioning have often been found to be indices of adaptation (Beardslee, 1983). Therefore, it is recommended that therapy target those processes most strongly associated

with successful coping. Preliminary conclusions from this study suggest that body image cohesion in childhood is an index for successful adaptation in adulthood. Further investigation of the outcomes of therapeutic interventions directed toward normalizing the experience of incested children regarding physical activity and body image is indicated. Specifically, the efficacy of therapy incorporating components of physical activity to counteract tendencies toward decreased body involvement, and activities that engender a sense of control within the context of interaction with the environment and provide concrete feedback regarding body structure and abilities, warrants exploration.

This study found that cognitive organization, reflected in the portrayal of body image, and physical activity in childhood discriminated between individuals reporting incest and no abuse. Further, a non-abusive background was associated with more effective use of coping skills in adulthood.

#### Adults.

The results of this study associated a reported history of incest with distortion of body image, but did not indicate that physical activity in adulthood was associated with changes in body image. Evidence that adults reporting incest histories relied less on a more advanced coping style (Replacement) than did reportedly non-abused adults also was

found. This suggests that the further development of cognitive skills, such as discrimination and decision making, may be critical in increasing coping strategies and counteracting the passivity apparently associated with reported incestuous victimization. Research exploring the efficacy of cognitive skill development with adults reporting a history of incest is indicated.

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## APPENDIX A

Recruitment Materials

Flyer

Endorsement



## RESEARCH

The ways we experience our bodies are an important part of who we are. The ways that we cope with stressful events impact the ways our experience unfolds. For women who have been abused, exceptional demands have been made on their coping abilities and their bodies.

For a number of years, I have worked as a therapist for women who have been abused. In order to help direct therapy to better promote healing, I am now studying the coping approaches and body experiences of women, through my doctoral dissertation. It is my intention to better understand the impact of abuse and the strengths and adaptive abilities involved by learning from the experiences of women who have confronted a variety of issues in their lives. I am particularly interested in three groups of women: those who have been physically abused during childhood, those who have been incestuously abused during childhood, and those who have never been physically or sexually abused. Participation in this study will take about 1 1/2 hours. I will arrange a meeting place convenient to you. Your participation will involve completing 5 questionnaires (including an information sheet with facts about yourself) and a personal interview. In the interview, we talk about the ways you cope with stress and the way you experience your body.

### ALL INFORMATION WILL BE KEPT CONFIDENTIAL

Names will not be associated with your responses or with any of the results of this study. Number coding will be used instead of names to keep track of information. You may refuse to answer any questions and may stop your participation at any time without reprisal. Your time and interest will be appreciated, whether you start, finish, or simply read this flyer. Results of this study, when completed, will be made available to you upon your request.

If you are willing to participate in this study, please

**CALL LAURA BROWN at (603) 399-7716**

(please call collect if it's a long distance call)

or

Leave your name and number with

I'll call you back as soon as I get the message

\*\*\*\*\*

First name: \_\_\_\_\_

Phone number: \_\_\_\_\_ Best time to call: \_\_\_\_\_

## ENDORSEMENT

Laura Brown has discussed with me her research project for her doctoral dissertation at the Virginia Consortium for Professional Psychology. She will investigate the ways that childhood sexual abuse may be reflected in and/or influence body image and coping styles in adulthood. An increased awareness of the relationship between these factors may lead to more effective preventative and therapeutic interventions with individuals who experience this type of trauma.

This study is being conducted in accordance with the standards for human subjects set by the APA and by the College of William and Mary; every effort will be made to protect the confidentiality of participants.

The inconvenience associated with participation in the study should be limited to the amount of time and effort required to complete the interview and questionnaires, and to the potential arousal of associated emotional material. Ms. Brown and Dr. Glenn Shean will be available to discuss with subjects any responses precipitated by participation in the study, and to provide appropriate referral, if necessary.

Please contact Ms. Laura Brown at (804) 221-8326 or Dr. Shean at (804) 221-3886 with any questions which arise during this study.

\_\_\_\_\_ agrees to  
agency/organization

allow the recruitment of subjects from \_\_\_\_\_  
source

\_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ Title \_\_\_\_\_

## APPENDIX B

Measures

Script

Relevant Variable Questionnaire

Assessment of Coping Interview and scoring

## VERBATIM SCRIPT

"Hi, I'm Laura, and I am doing research for my doctoral dissertation. I need the help of some women who can share with me about themselves and some of their experiences coping with childhood incest (difficult events) in their lives. This will involve filling out five (5) questionnaires and having an interview with me. It will take about 1 1/2 to 2 hours total; we can arrange to do it in one sitting or break it into two parts, if that fits your schedule better. Are you willing to participate? I will explain the study more fully afterward and you can obtain the final results if you wish. Great. Let's set up a convenient time for us to get together and do this."

"Hi, thanks for coming. First, please read and fill out this consent form. All responses will remain anonymous, and you may terminate your participation at any time. If you want the results of this study, please put your address below your signature on your consent form. This is the only record of your name that I will have, and no one but me will have access to these forms.

Okay, let's get started. I have some questionnaires for you to fill out. The first one is to gather some basic information about you and about the abuse. Please answer each question as honestly as you can. Some questions may not apply to you; just put N/A if the question doesn't fit. Feel free to ask any questions you have as we go along.  
[Relevant Variable Questionnaire]

Thanks. The next one asks you to let me know about some of your experiences. Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select one of the numbered descriptors that best describes HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST MONTH, INCLUDING TODAY. Place that number in the lined space to the left of the problem. Do not skip any items, and print your number clearly, please. If you change your mind, you can erase your first number. Read the example before beginning. If you have any questions, please ask me.  
[SCL-90-R]

Thank you. Now, here is a list of statements describing how people behave in different situations or how they feel about various things. Please indicate how often each statement describes your behavior or feeling by putting a check in the appropriate space.  
[AECOM COPING SCALES]

Good, thanks. This questionnaire consists of 28 questions about experiences you may have had in your daily life. I am interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you ARE NOT UNDER THE INFLUENCE OF ALCOHOL AND/OR DRUGS. To answer the questions, please read each one carefully and select one of the numbered descriptors that best fits the degree to which the experience described in the question applied to you IN THE PAST YEAR. Place that number in the lined space to the right of the question. Please answer all the questions as honestly as possible, without skipping any.  
[DISSOCIATIVE EXPERIENCES SCALE]

Thank you. This is the last one. Circle the figure that most accurately depicts your body size, as you perceive it to be. Please be honest. You may choose only one. Thank you. Now, circle the figure that most accurately depicts the body size you would most prefer. Again, please be honest.  
[BODY IMAGE ASSESSMENT]

Before we take a break, let me confirm the information you gave me. You're \_\_\_\_\_ tall? Would you stand up against the door/wall so I can check that, please? And you weigh \_\_\_\_\_? Would you step on the scale so I can get a number for today please?

Okay, thanks. Let's take a little break before we go on to the interview. Would you like some coffee or tea or a soda?

Alright, now I am going to ask you to tell me about yourself, in your own words. First, I want to learn something about you when you were growing up.  
[INTERVIEW]

Are there any questions you would like to ask me about any part of this project? In general, I am interested in the ways people cope with difficulties in their lives and how their styles of coping are related to the way they experience their bodies. I am particularly interested in how certain physical and emotional experiences, such as sexual abuse, affect this relationship.

Thank you for your help on this project, and especially for sharing your experiences and thoughts with me. If you have any questions about what we have talked about today, you may call me at \_\_\_\_\_."

ID # \_\_\_\_\_  
Date \_\_\_\_\_

Part I: Demographic Data

1. Highest level of education completed \_\_\_\_\_
2. Age \_\_\_\_\_
3. Income:  
\_\_\_\_\_ Below 10,000 dollars \_\_\_\_\_ 26,000 to 36,000  
\_\_\_\_\_ 10,000 to 15,999 \_\_\_\_\_ Above 36,000  
\_\_\_\_\_ 16,000 to 25,999
4. Ethnicity  
\_\_\_\_\_ Caucasian \_\_\_\_\_ Hispanic  
\_\_\_\_\_ Black \_\_\_\_\_ Native American  
\_\_\_\_\_ Oriental \_\_\_\_\_ Other
5. How many brothers and sisters do you have? \_\_\_\_\_
6. Marital status:  
\_\_\_\_\_ Married \_\_\_\_\_ Separated  
\_\_\_\_\_ Divorced \_\_\_\_\_ Single, never married  
\_\_\_\_\_ Widowed \_\_\_\_\_ Cohabiting
7. Parents' marital status:  
\_\_\_\_\_ Married \_\_\_\_\_ Separated  
\_\_\_\_\_ Divorced \_\_\_\_\_ Single, never married  
\_\_\_\_\_ Widowed
8. Please rate your physical health:  
\_\_\_\_\_ Good \_\_\_\_\_ Fair \_\_\_\_\_ Poor
9. \_\_\_\_\_ Height \_\_\_\_\_ Weight
10. Do you have any physical problems that you are aware of?  
\_\_\_\_\_ yes \_\_\_\_\_ no

If yes, please describe as follows:

Problem	When it started
_____	_____
_____	_____
_____	_____
_____	_____

11. In the past year, have you been concerned about being or becoming overweight?  
 \_\_\_\_\_ never \_\_\_\_\_ rarely \_\_\_\_\_ sometimes \_\_\_\_\_ often \_\_\_\_\_ always
12. In the past year, have you missed your period three or more times in a row, when you were NOT PREGNANT? \_\_\_\_\_ yes \_\_\_\_\_ no
13. Has this ever happened to you? \_\_\_\_\_ yes \_\_\_\_\_ no  
 When? \_\_\_\_\_
14. In the past year, have you experienced repeated eating "binges", when you ate large amounts of food at one time?  
 \_\_\_\_\_ yes \_\_\_\_\_ no
- a. Did your eating seem out of your control during these "binges"? \_\_\_\_\_ yes \_\_\_\_\_ no
- b. How often has this occurred?  
 2 or more times a week \_\_\_\_\_  
 less than 2 times a week \_\_\_\_\_
- c. How long have you had eating binges?  
 3 months or more \_\_\_\_\_  
 less than 3 months \_\_\_\_\_
15. Have you ever had eating binges? \_\_\_\_\_ yes \_\_\_\_\_ no  
 When? \_\_\_\_\_ a.  
 How often?  
 2 or more times a week \_\_\_\_\_  
 less than 2 times a week \_\_\_\_\_
- b. How long did you have eating binges?  
 3 months or more \_\_\_\_\_  
 less than 3 months \_\_\_\_\_
16. In the past year, have you used diuretics or laxatives to prevent gaining weight? \_\_\_\_\_ yes \_\_\_\_\_ no
17. Have you ever used diuretics or laxatives to prevent gaining weight? \_\_\_\_\_ yes \_\_\_\_\_ no
18. In the past year, have you tried to vomit after eating to prevent gaining weight? \_\_\_\_\_ yes \_\_\_\_\_ no
19. Have you ever tried to vomit after eating to prevent gaining weight? \_\_\_\_\_ yes \_\_\_\_\_ no
20. Studies have shown that a large percentage of women have been victims of sexual or physical abuse, even as children. Has this ever happened to you? \_\_\_\_\_ yes \_\_\_\_\_ no

If the abuse occurred in childhood, please complete  
 Sections IIA and IIIA.

If the abuse occurred in adulthood, please complete  
 Sections IIB and IIIB.

IIb. Information Related to Abuse

21. Age when abuse began \_\_\_\_\_
22. Age when abuse ended \_\_\_\_\_
23. For what length of time did the abuse occur:  
\_\_\_\_\_ less than one month  
\_\_\_\_\_ one to six months  
\_\_\_\_\_ seven to eleven months  
\_\_\_\_\_ one to two years  
\_\_\_\_\_ three to five years  
\_\_\_\_\_ greater than five years
24. Please estimate how many times you were abused:  
\_\_\_\_\_ one time  
\_\_\_\_\_ five to ten times  
\_\_\_\_\_ eleven to twenty times  
\_\_\_\_\_ more than twenty times
25. Were you physically abused?  
If yes, please describe the physical abuse:  
\_\_\_\_\_ being given drugs or medicine  
\_\_\_\_\_ being deprived of meals  
\_\_\_\_\_ being hit by abuser(s)  
\_\_\_\_\_ eating or drinking human excrement/ bodily fluid (i.e. urine, blood, stool)  
\_\_\_\_\_ being physically restrained  
\_\_\_\_\_ other (please describe) \_\_\_\_\_
26. In addition to the physical abuse, were you ever sexually forced or harmed by the abuser? \_\_\_\_\_ yes \_\_\_\_\_ no
27. The sexual abuse included (check all that apply):  
\_\_\_\_\_ coerced/ forced sexual contact  
\_\_\_\_\_ coerced/ forced unwanted sexual acts  
\_\_\_\_\_ other (please specify)
28. Were you threatened not to tell about the abuse? \_\_\_\_\_ yes \_\_\_\_\_ no  
If threats were made to you, please describe them:
29. Were you threatened with supernatural powers? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, please describe:
30. How frightened were you by any threats made?  
\_\_\_\_\_ very frightened \_\_\_\_\_ somewhat frightened \_\_\_\_\_ not frightened  
at all



Part IIIa: Information Related to the Offender(s)

35. Please describe each person who sexually abused you, as follows:

<u>Relationship to you</u> (i.e. father, mother, stepfather, brother, etc.)	<u>Age</u>
_____	_____
_____	_____
_____	_____
_____	_____

36. Did the offender(s) live in the same home as you at the time of the sexual abuse? \_\_\_\_\_ yes \_\_\_\_\_ no

37. Was child protective services involved? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, was the case substantiated/ believed? \_\_\_\_\_ yes \_\_\_\_\_ no

38. Were the police involved? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, was the case supported/ believed? \_\_\_\_\_ yes \_\_\_\_\_ no

39. Were criminal charges filed against the offender(s)? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, what was the outcome of the court procedures?  
\_\_\_\_\_ guilty verdict  
\_\_\_\_\_ not guilty verdict  
\_\_\_\_\_ charges dismissed  
\_\_\_\_\_ other, please describe \_\_\_\_\_

40. What was the outcome for the offender?  
\_\_\_\_\_ prison (how long was the sentence?) \_\_\_\_\_  
\_\_\_\_\_ therapy and probation  
\_\_\_\_\_ therapy only  
\_\_\_\_\_ prison and therapy  
\_\_\_\_\_ other, please describe \_\_\_\_\_

IIa. Information Related to Abuse

21. Age when abuse began \_\_\_\_\_
22. Age when abuse ended \_\_\_\_\_
23. For what length of time did the abuse occur:  
\_\_\_\_\_ less than one month  
\_\_\_\_\_ one to six months  
\_\_\_\_\_ seven to eleven months  
\_\_\_\_\_ one to two years  
\_\_\_\_\_ three to five years  
\_\_\_\_\_ greater than five years
24. Please estimate how many times you were abused:  
\_\_\_\_\_ one time  
\_\_\_\_\_ five to ten times  
\_\_\_\_\_ eleven to twenty times  
\_\_\_\_\_ more than twenty times
25. The sexual act included (check all that apply):  
\_\_\_\_\_ fondling/touching of breasts  
\_\_\_\_\_ fondling/touching of genitals  
\_\_\_\_\_ placing of finger into vagina or rectum  
\_\_\_\_\_ oral genital sexual activity  
\_\_\_\_\_ placement of penis into vagina  
\_\_\_\_\_ placement of penis into rectum  
\_\_\_\_\_ placement of object into vagina  
\_\_\_\_\_ placement of object into rectum  
\_\_\_\_\_ taking pictures of you naked or involved in sexual acts  
\_\_\_\_\_ satanic rituals  
\_\_\_\_\_ sexual acts with other children  
\_\_\_\_\_ other (please specify) \_\_\_\_\_
26. In addition to the sexual abuse, were you ever physically harmed by the abuser? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, please describe the physical abuse:  
\_\_\_\_\_ being given drugs or medicine  
\_\_\_\_\_ being deprived of meals  
\_\_\_\_\_ being hit by abuser(s)  
\_\_\_\_\_ eating or drinking human excrement/ bodily fluid (i.e. urine, blood, stool)  
\_\_\_\_\_ being physically restrained  
\_\_\_\_\_ other (please describe) \_\_\_\_\_
27. Were you threatened not to tell about the abuse? \_\_\_\_\_ yes \_\_\_\_\_ no  
If threats were made to you, please describe them: \_\_\_\_\_

28. Were you threatened with supernatural powers? \_\_\_\_ yes \_\_\_\_ no  
If yes, please describe:

29. How frightened were you by any threats made?  
\_\_\_\_very frightened \_\_\_\_somewhat frightened \_\_\_\_not frightened  
at all

30. Do you still have fears related to the abuse? \_\_\_\_ yes \_\_\_\_ no  
If yes, please describe:

31. Have you received therapy for the sexual abuse? \_\_\_\_ yes \_\_\_\_ no

32. Have you received therapy for other concerns? \_\_\_\_ yes \_\_\_\_ no  
If yes, please describe briefly:

33. If you have received therapy, how long did it last?  
\_\_\_\_ less than one month  
\_\_\_\_ one to two months  
\_\_\_\_ three to six months  
\_\_\_\_ seven to eleven months  
\_\_\_\_ one to two years  
\_\_\_\_ more than two years

34. Are you still in therapy? \_\_\_\_ yes \_\_\_\_ no  
If your therapy has ended, when did it end? (please give  
approximate date) \_\_\_\_\_

31. Do you still have fears related to the abuse? \_\_\_\_ yes \_\_\_\_ no  
If yes, please describe:
32. Have you received therapy for the abuse? \_\_\_\_ yes \_\_\_\_ no
33. Have you received therapy for other concerns? \_\_\_\_ yes \_\_\_\_ no  
If yes, please describe briefly:
34. If you have received therapy, how long did it last?  
\_\_\_\_ less than one month  
\_\_\_\_ one to two months  
\_\_\_\_ three to six months  
\_\_\_\_ seven to eleven months  
\_\_\_\_ one to two years  
\_\_\_\_ more than two years
35. Are you still in therapy? \_\_\_\_ yes \_\_\_\_ no  
If your therapy has ended, when did it end? (please give  
approximate date) \_\_\_\_\_

Part IIIb: Information Related to the Offender(s)

36. Please describe each person who abused you, as follows:

Relationship to you (i.e. romantic partner, spouse, son, daughter, etc.)	Age
---	-----

_____	_____
_____	_____
_____	_____
_____	_____

37. Did the offender(s) live in the same home as you at the time of the abuse? \_\_\_\_\_ yes \_\_\_\_\_ no

38. Were the police involved? \_\_\_\_\_ yes \_\_\_\_\_ no  
If yes, was the case supported/ believed? \_\_\_\_\_ yes \_\_\_\_\_ no

39. Were criminal charges filed against the offender? \_\_\_\_yes \_\_\_\_ no  
If yes, what was the outcome of the court procedures?  
\_\_\_\_\_ guilty verdict  
\_\_\_\_\_ not guilty verdict  
\_\_\_\_\_ charges dismissed  
\_\_\_\_\_ other, please describe \_\_\_\_\_

40. What was the outcome for the offender?  
\_\_\_\_\_ prison (how long was the sentence?) \_\_\_\_\_  
\_\_\_\_\_ therapy and probation  
\_\_\_\_\_ therapy only  
\_\_\_\_\_ prison and therapy  
\_\_\_\_\_ other, please describe \_\_\_\_\_

## ASSESSMENT OF COPING INTERVIEW

Can you describe what it was like for you growing up?  
How did you spend your time? What did you especially like to do?  
What kind of student were you?  
What were you most proud of when you were growing up?

Please describe your family. Who was in it? Who did you get along with best? Next best? Least well?  
Outside of your family, who was (were) most important to you? Tell me about her/him.  
How would you describe yourself during this time?  
How old would you be when you best fit that description?  
What stands out in your mind about this time we're talking about?

Tell me about yourself physically.  
What did you look like when you were a child?  
What did you see when you looked in the mirror?  
How did your body feel to you?  
Were you physically active? What kinds of things did you do best?  
What did others see when they looked at you?  
What did others tell you about your body?  
How old were you at this time that you're describing?

Everybody faces problems and strains in their lives.  
What were the hardest problems you faced as a child?  
Generally, what kept you going when things were tough?  
What did you do to feel better?  
What did you wish for?

Studies have shown that a large percentage of women have been victims of sexual or physical abuse, even as children. Has this ever happened to you?  
How did you understand what was happening in your family at this time?  
What enabled you to get through the incest/this situation?  
What aspects of the situation were most difficult to deal with?  
Did you talk to anyone about the abuse/situation?  
Who else knew about it? How did they know?  
How did others perceive the abuse/situation?  
Did you know anyone else this was happening to?

Now, please draw a picture of yourself as a child. Be sure to make your whole self, not just your head and shoulders. Please do not draw a stick figure. (HFDT)

Thank you. Now I want to learn about you as an adult.  
Tell me something about what your life is like right now.  
What is your living situation like now?  
Who is your family? Please name them for me.  
Outside of your family, who is most important to you?  
What do you care about, think about?  
How do you spend your time? What do you especially like to do?  
What kind of work do you do?  
How do you go about your work/job?  
What are you like when you are working?  
What are you most proud of?

Describe to me what you look like to yourself now.  
What do you see when you look in the mirror?  
What does your body feel like to you?  
What do others see when they look at you?  
Are you physically active at this time in your life?  
What is different about your body now, compared to before?

What are the most difficult problems you face now?  
Are these the same as you had when you were growing up or are they different?  
What enables you to get through your problems now?  
What do you do to feel better? What do you wish for now?

How do you understand your abuse/difficulties, now that you're grown?  
Do you talk to anyone about the abuse/it now?  
Does anyone in your current life know about it?  
Do you know anyone else who's faced a situation like yours?

I'm interested in how you view your experience now.  
What have you learned from what you've been through?  
Over your life, what has been most important for you?  
Looking back over your life, what relationships have been really important to you? Why? What's made them important?  
Have you had a relationship with someone who helped you shape the person you have become? Who was that person?  
Have you had a really important relationship where you were responsible for taking care of another person? Who was that? How important was that in your life?  
How would you describe your mother/primary caretaker? Your father? Abuser?  
Has your view of your parents/these people changed? In what ways?  
Is the way you see yourself now different from the way you saw yourself in the past? In what ways?  
What led to the changes?  
What advice would you give other girls facing incest/a

situation like yours?

Now, please draw a picture of yourself as an adult. Be sure to make your whole self, not just your head and shoulders. Please do not draw a stick figure. (HFDT)

Thank you. Before we stop, are there any other questions that I should have asked you, that would have thrown some light on these issues we are interested in; that is, the ways women cope as they live their lives, using their minds, their feelings and their bodies?



## ASSESSMENT OF COPING INTERVIEW SCORING GUIDELINES

Although scores are based on the entire interview, including both childhood and adulthood, it is necessary to score each part of the interview (childhood & adulthood). These are (usually) delineated by the responses before (child) and after (adult) the first drawing.

The scoring categories (below) have been adapted from Beardslee's (1992) studies of behavioral competence.

1. Centrality of Relationships
2. Action oriented stance (in a physical sense, usually)
3. Accurate appraisal of the situation (including blame, guilt, etc.)
4. Integration/ Understanding (capacity to integrate events into larger meaning of one's life experience (this may be sensitive to age)

Item 1. CENTRALITY of RELATIONSHIPS

0-4 scale

- 0 = significant avoidance of almost all relationships  
denial of any important relationships in childhood or  
adulthood
- 1 = acknowledges relationships hold some (mild to moderate)  
importance; does not differentiate between individuals  
(e.g. my class, the kids on my block, etc.); does not  
ascribe much significance to relationships, relative to  
other life experiences (be aware that subject may  
identify specific relationships without naming names,  
e.g. by roles: teacher, neighbor, etc. to maintain  
confidentiality)
- 2 = describes relationships as one significant part of  
experience; acknowledges relationships as one aspect of  
experience, without primacy; identifies relationships  
in some way; may be specific, but still relates  
significant isolation
- 3 = describes relationships as a very important aspect of  
experience. Identifies specific relationships.
- 4 = experience is described (almost) entirely in terms of  
relationships; identifies relationships as primary  
value in one's life; identifies specific significant  
relationships and associate meaning during one's life  
(e.g. my aunt, because I could always talk to her)

Item 2. ACTION ORIENTED STANCE

0-4 scale

- 0 = avoids physical activity whenever possible. Expresses  
dislike or indifference to physical activity
- 1 = occasionally participates in physical activities. Does  
not ascribe significant importance to these  
experiences
- 2 = identifies a moderate level of physical activity.  
Activity is described as occurring as a function of  
other objectives, rather than for its own sake (e.g. I  
have 2 toddlers, I'm always moving)
- 3 = moderate to high level of physical activity is  
identified; pursues some physical activity deliberately
- 4 = Physical activity constitutes a primary aspect of  
individual's experience. Pursues activity deliberately  
and consistently. Directed effort is clear.

Item 3. ACCURATE APPRAISAL of SITUATION

0-2 scale

- 0 = blames self for situation/ abuse/ difficulties (as child); expresses belief that she is responsible for, or caused problem; no acknowledgment of child's position; believes abusive or problematic situation was normal or doubts that it exists
- 1 = unclear and/or confused about responsibility for situation/abuse/ problems; (e.g. attributes responsibility equally to child and adult(s))
- 2 = understands that adult(s) was responsible for situation/ abuse/ problems; acknowledges own limitations in dealing with adult situation, based on level of development (e.g. child); expresses understanding of parents' limitations (e.g. dad was/is sick); (child and/or adult)

Item 4. INTEGRATION/UNDERSTANDING

0-4 scale

- 0 = acknowledges that situation/abuse/problems occurred and denies significant impact
- 1 = defines life experience primarily by situation/abuse/problems
- 2 = identifies some experiences besides specific situation/ abuse/ problems, situation/abuse/problem-related effects
- 3 = identifies some specific effects of situation/abuse/ problematic experiences on life experiences; identifies many other experiences in current life
- 4 = identifies some positive aspect of learning associated with specific situation/abuse/problematic experiences (e.g. led me to pay more attention to children's needs, taught me to take care of self, etc.) that generalize to life

## APPENDIX C

Ethics forms

Consent form

Clinical back-up form

## CONSENT FORM

The research in which I am being asked to participate is A Comparison of Coping Styles and Body Image in Abused and Non-Abused Women. It will investigate the ways that sexual and physical abuse may be manifested in adulthood. An increased awareness of the relationship between these factors may lead to more effective preventative and therapeutic interventions with individuals who experience this type of trauma.

Women who meet the criteria of the study are being asked to complete a personal interview, including 2 drawings, and 5 questionnaires. The interview and questionnaires address ways of coping and body experiences currently and in childhood, and an information sheet pertains to facts about me and my abuse. I understand that it should take approximately 1 1/2 - 2 hours to complete the study.

I give my consent for my interview to be audio recorded. I understand that all tapes will be identified solely by number code and will be destroyed immediately following transcription, within three months of the interview date.

Every effort will be made to protect my confidentiality. My name will not be associated with any of my responses. Instead, the data will be number coded. I understand that the results of the study will not report information about any of the individual people who participated in the study; my name will not be associated with the results.

My participation in the study is voluntary. I may withdraw from the study at any time. If I have any questions about the study, I may discuss them with Laura Brown, M.A. at (908) 571-5304 or Glenn Shean, Ph.D. at (804) 221-3886. The inconvenience associated with participation in the study should be limited to the amount of time and effort required to complete the interview and questionnaires, and to the potential arousal of associated emotional material. Ms. Laura Brown and Dr. Glenn Shean will be available to discuss with me any responses precipitated by participation in the study. There are no known risks associated with completing the questionnaires and interview. There may be other risks not yet identified.

My signature below will indicate that I have understood the contents of this form and voluntarily agreed to participate in this study. If I am interested in receiving a summary of the results of this study I will include my address beneath my signature.

SIGNATURE	DATE	ADDRESS: Number Street	
WITNESS	DATE	City	State Zip

Laura Brown has discussed with me her research project for her doctoral dissertation at the Virginia Consortium for Professional Psychology. I am willing to respond to referrals which may arise from this study and to provide appropriate clinical services.

---

Name

---

Date

---

Title

## VITA

Laura Elizabeth Brown

Virginia Consortium for Professional Psychology  
ODU/NSU Higher Education Center  
3300 South Building/Room 201  
397 Little Neck Road  
Virginia Beach, VA 23452

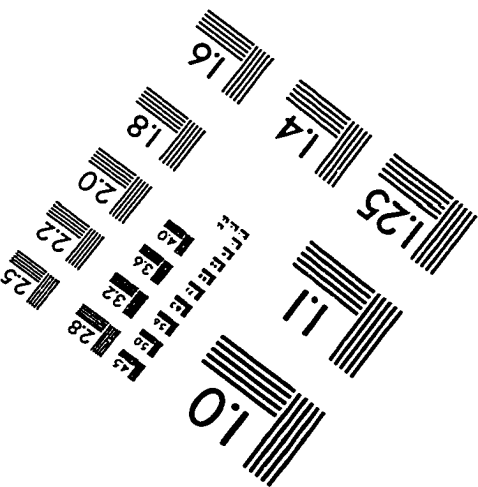
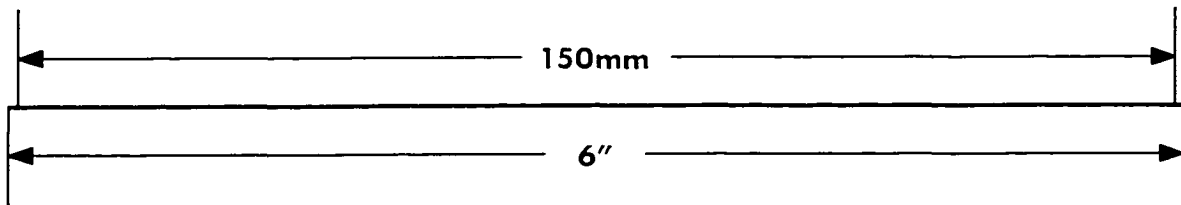
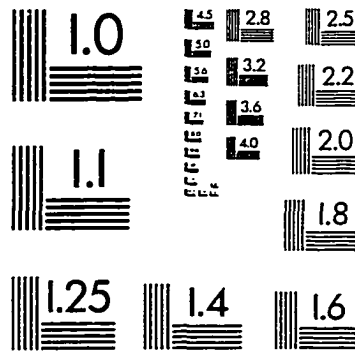
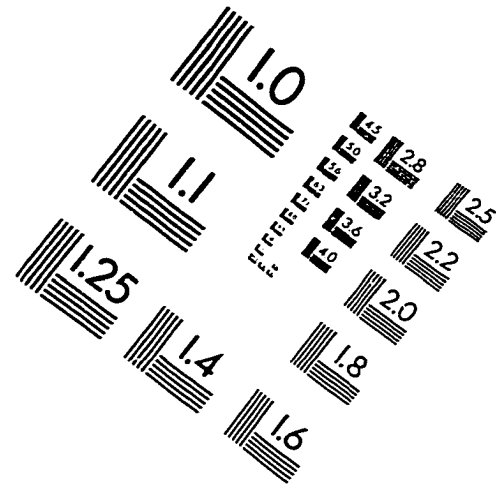
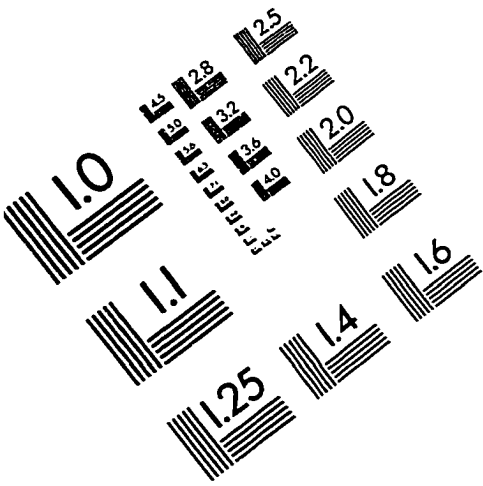
Educational Background

B.A., Psychology & Philosophy  
Clark University, August 1972

M.A., Counseling  
Goddard-Cambridge Graduate School, October 1978

Psy.D., Clinical Psychology  
Virginia Consortium for Professional Psychology  
August 1997

# IMAGE EVALUATION TEST TARGET (QA-3)



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