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ABSTRACT

The prevalence of sexual conflicts in many patients with eating disorders has been well documented. A parallel has been found between psychological problems experienced by victims of childhood sexual abuse and patients with anorexia nervosa and/or bulimia. Past studies have used inpatient clinical samples; however, this study extended this area of inquiry to a non-inpatient sample. Subjects (N=89) were undergraduates at Ursinus College in Pennsylvania. Each subject completed a 66-item questionnaire on the extent of eating disorders, perception of maternal weight conflicts, and types of unwanted sexual experiences. Several maternal behaviors were strongly associated with disordered eating in both daughters and sons. Mothers who were perceived as being preoccupied with fat, food, and weight were more likely to have children who exhibited eating disorder behaviors of the mother. For females, maternal dieting and preoccupation with fat were significantly associated with sexual abuse. A mother's sexual withdrawal from her spouse may enhance a daughter's risk for sexual abuse. Subjects who experienced some form of sexual abuse were more preoccupied with fat and food and wore loose fitting clothes. The failure to find any significant correlates with physical abuse in females may have been due to an extremely low rate of physical abuse in females. Additional studies should be conducted to clarify the extent to which mothers unknowingly contribute to their children's eating disorder. (ABL)

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**Disordered Eating in College Students:
Links with Childhood Abuse and Maternal Eating Behavior**

**Kim Feilke
Catherine Chambliss**

1992

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Abstract

The prevalence of sexual conflicts in many patients with eating disorders has been well documented. A parallel has been found between the psychological problems experienced by victims of childhood sexual abuse and patients with anorexia nervosa and/or bulimia. Past studies have used inpatient clinical samples, however this study extended this area of inquiry to a non-inpatient sample. The subjects were 89 undergraduates at Ursinus College. Each subject completed a 66 item questionnaire. It was comprised of the 40 item EAT (Garner and Garfinkle, 1979), the 14 item SEQ (Russell, 1983), three Physical Abuse items, and nine questions concerning mothers' eating behaviors. It was hypothesized that sexual and physical abuse would be correlated with EAT items. The results provided no support for a correlation between the overall EAT score and sexual or physical abuse. However, several individual EAT items were significantly correlated with both forms of abuse, partiall supporting the above hypothesis. This study also explored the possibility that maternal weight conflicts mediate the relationship between childhood abuse and eating disorders. Significant correlations between EAT items and maternal behaviors supported the notion that maternal behaviors and attitudes influence childrens' eating experiences. Additionally, several sex differences were found as well as many correlations with laxative use.

Anorexia Nervosa and Related Eating Disorders, Inc. (ANRED) reports that eating disorders have reached epidemic proportions (1985). Anorexia and bulimia affect as many as twenty percent of young women between the ages of twelve and thirty. Fifteen percent of the people with eating disorders die from complications of starving and binge/purging. The percent of women diagnosed with eating disorders does not even include overweight individuals. Overeating is also an eating disorder, yet it is frequently ignored.

In recent years, evidence for a link between sexual abuse and disordered eating in clinical samples has been accumulating. Since sexual abuse is traumatic it is likely that it may cause later problems related to negative self image, negative body image, or fears of loss of control. Childhood sexual abuse may increase one's vulnerability to develop an eating disorder. A female who is sexually abused may try to alter her body in an attempt to appear unattractive to men. Anorexia may be an attempt to avoid further sexual abuse through physical alteration. Likewise, overweight individuals may also be attempting to become asexual and undesirable. "...Knowing no other way to express their fear, rage, confusion, and need for help, [abused] women turn to food for comfort and a sense of control" (ANRED, 1985).

In 1987, an investigation by Goldfarb examined the role of childhood sexual abuse antecedent to anorexia nervosa, bulimia, and compulsive overeating. Three case reports were used to illustrate the development of eating disorders in the context of sexual abuse. It is interesting to note that all three cases involved periods of overeating. The first case looked at bulimia following extended sexual abuse. This girl had first been sexually abused at age six by a neighbor. In the following three years the abuse became frequent. She said that she immediately responded to her intense anxiety and sense of vulnerability by compulsively overeating. She described this continual overeating as a response to her horrifying sense of self-loathing and anxiety in anticipation of the next attack. Later she began to vomit and became bulimic.

The second case was about two sisters victimized by their father. They recalled being forced, by their father, to eat spoiled food and being physically punished at the dinner table. They described their childhood as one in which eating behavior reflected conflicts around food. Both sisters began to gorge themselves and then purge. Later one became anorexic and the other became "adamantly" overweight. The third case involves a girl

who experienced incest and three rapes by age sixteen. She began to overeat as a means of avoiding men. She had always been thin and attractive and she viewed this as the reason she was sexually abused.

In each of these cases the victims experienced a sexual trauma which later developed into an eating problem. They feared sex and turned to eating as a way to alter their bodies and avoid sex. Each victim found comfort in food. They sought it as a means of control. Each individual overate, however; the bulimic and anorexic felt guilt and thus began to purge or starve. Overweight individuals do not purge by vomiting, like bulimics, or starve themselves, like anorexics. However, like anorexics and bulimics they are "addicted" to food, much like a drug addict is addicted to drugs. Eating is used as a means of self-comforting and an emotional regulator.

Schechter, Schwartz, & Greenfield looked at two case reports to examine sexual assault and anorexia nervosa. They found that there are "similarities between the psychological sequelae of sexual assault and the typical psychologic manifestations of anorexia nervosa". In both of the cases they considered, an adverse sexual experience preceeded the development of the eating disorder. The clinical analyses indicated that guilt, loss of control, and distortion of body image were characteristic. The trauma of the adverse sexual experiences seemed to predispose the individuals to the eating disorder. Since the unwanted sexual experiences occurred in childhood it is likely that shame and guilt were felt. This may have led to a negative body image and a sense of control loss.

The prevalence of sexual conflicts in many patients with eating disorders has recently been well documented in clinical setting surveys. Therapists have found a high rate of childhood sexual abuse in their patients with eating disorders. Palmer et al. (1990) found a surprisingly high rate of defined adverse sexual experiences in women with eating disorders. Sloan & Leichner (1986) reported that five out of six patients in an anorexia treatment program gave histories of sexual abuse in childhood. Sexual abuse may be a causal factor in the development of the eating disorder.

Calam & Slade (1987) studied the interrelationships between unwanted sexual or intrafamilial experiences and eating problems. The subjects were 130 undergraduates at the University of Liverpool and twelve patients in therapy for eating disorders. The student subjects completed four questionnaires. The Eating Attitudes Test (EAT : Garner & Garfinkel, 1979) measured the extent of eating problems for each

student, the Sexual Events Questionnaire (SEQ : Russell, 1983) concerns unwanted sexual experiences, the Parental Bond Instrument (PBI : Parker et al, 1979) measured their relationship with their parents, and the Body Satisfaction Scale (BSS : Slade et. al.) measured body satisfaction.

Results from the SEQ showed that all forms of sexual experience were associated with higher EAT scores. Scores on the SEQ were higher among the patients with eating disorders. One or more unwanted sexual experiences were reported by 58% of the respondents and 34% of these experiences involved force. Twenty percent had one or more intrafamilial experience, 11% were with a close male relative, 9% were with more distant relatives, and 2% were with close female relatives.

Common comments from patients revealed the following : they paralleled an appetite for food with one for sex; since their abuse they have feared to appear attractive to men and thus have changed their body shape; and that the sexual abuse was an experience of being out of control while the eating disorder was one of being in control.

The results indicated that the BSS was not significantly related to the SEQ. This led the investigators to conclude that it is unlikely that body dissatisfaction following abuse is a major factor in the development of eating problems. Results from the PBI showed that the perception of their mother bore an important relationship to experiences of problems with eating and sexual experiences. On the PBI those with problems showed lower maternal care and higher maternal overprotection.

Palmer, Oppenheimer, Digon, Challoner, & Howells (1990) studied 158 females with clinical eating disorders. Two screening questionnaires were used to detect abused and eating disordered women. Eighty anorexics and seventy-eight bulimics were found. The first part of the study used the Sexual Life Events Inventory (SLE : Finkelhor, 1979) to describe sexual events. This questionnaire asked the subjects to describe events before the age of thirteen with someone over sixteen, from ages of thirteen to fifteen with someone five or more years older, and any later adverse sexual experiences. The second part of the study was an unstructured interview with a social worker to further discuss her responses on the SLE.

The results indicated that thirty-one percent reported experiences within criteria of childhood abuse and twenty-six percent reported events within extended criteria. In the younger group (under 13) the abuser was on average twenty-seven years older and was a family member half the time. In the older (13-15) group the abuser was an average of seventeen

years older and was a family member one third of the time. Over eighty percent of the events involved "contact abuse" and ninety-seven percent of the younger groups's abuse and seventy-four percent of the older group's abuse was initiated by another.

R. Hall, Tice, Beresford, Wooley & A. Hall (1989) studied sexual abuse in patients with anorexia nervosa and bulimia. The data from their study strongly suggested that the possibility of sexual abuse or assault must be assessed and the results included in a comprehensive therapy plan for eating-disordered patients. Fifty percent of the anorexic and bulimic patients had suffered sexual abuse. Of the four types of abuse studied : rape, incest, fondling and homosexual assault, only rape victims had sought previous help from caregivers. Eighty-five percent of the sexual abuse occurred before age seventeen. Patients who had been subjected to rather violent or aggressive sexual assaults by family members were better able to deal with the emotional consequences because they specifically directed their anger and rage toward the perpetrator later in life. Those who, as a child, reported abuse and were not believed, were the most severely damaged later in life.

Bailey & Gibbons (1989) explored four forms of victimization: rape, sexual molestation, child abuse, and partner abuse. They found that child abuse and bulimia are clearly related and the relationships between the other forms of victimization were smaller, but in the predicted direction. The results indicated that the most common form of victimization in females was sexual molestation. Root, Fallon & Fredrick (1986) also studied bulimic women and found that sixty-six percent of their sample had been physically abused, raped, battered, or sexually molested. Once again the data were based on clinical observations.

Root and Fallon (1988) studied the incidence of the four forms of physical victimization in a bulimic sample. Questionnaires and interviews were used on an outpatient sample of bulimics. The results indicated that sixty-six percent of these women had been physically victimized. Twenty-three percent were raped, twenty-nine percent were sexually molested, twenty-nine percent were physically abused and twenty three percent were battered. Similarities were found between anorexics and incest victims on the EAT. The results of this study suggest that the majority of bulimics with a history of bingeing and purging have been physically victimized.

Miller (1990) studied sexual abuse as a factor in eating disorders. She found that sixty-one percent of the Renfrew Center for eating

disorders patients had been sexually abused before the age of eighteen. The median number of incidents which occurred for each woman was three. She compared her study to two major community studies of sexual abuse done by Russell (1983), and Wyatt (1985). She found that her sample experienced significantly more contact childhood sexual abuse and more perpetrators used physical force.

One limitation of most of the studies in this area involves their heavy reliance on clinical and all female samples. In order to assess the generalizability of findings from previous research, the present study used an undergraduate student sample to see if subclinical disordered eating is associated with a history of abuse. Since the number of individuals suffering from both eating disorders and sexual abuse appears to be rising, it is important to determine whether this relationship exists in the general population.

In this extension of earlier work to a nonclinical population, it was hypothesized that the psychological effects of sexual abuse would create a vulnerability for disordered eating in both males and females. Since several studies have found violence or force involved in subjects' adverse sexual experiences, the questionnaire for the present study also included three questions concerning physical abuse. In studies looking at the impact of sexual abuse, it is conceivable that what has been seen represents just one facet of a wider association between eating problems and coercion, particularly where violence is concerned.

This study also explored the possibility that maternal weight conflicts may influence a child's eating and may mediate the relationship between childhood sexual abuse and eating disorders. Conceivably, if a mother struggles with her own weight, she may take her frustrations out on her child in the form of abuse. A negative identification with an overweight child could compound such a process. Alternatively, a mother's marriage may be compromised by her weight problems making incest more likely as a result. The role of maternal factors in the development of eating disorders has been supported by recent work by Pike and Rodin (1991). They examined features of 77 mothers' attitudes and behaviors that were related to their daughters' problems. They found that mothers of daughters with disordered eating were themselves more eating disordered, and differed in their dieting history when compared to mothers of daughters who were not disordered. Furthermore, mothers of daughters with disordered eating thought their daughters should lose more weight and rated their daughters as less attractive than did mothers of

daughters who were not disordered. This investigation will further examine maternal influences as well as explore whether this link to maternal factors holds true for males as well as for females.

The present study is in part a replication of work by Calam & Slade (1989). Their sample consisted of 130 female undergraduates from science disciplines, who were administered the EAT and the SEQ. They found that sixty percent of their subjects experienced "some form of unwanted sexual experience". Thirty-one percent had unwanted experiences before the age of fourteen and twenty percent of these experiences were intrafamilial. The data supported their hypothesis that there is a significant association between unwanted sexual experiences and eating problems. It further suggested that sexual abuse may act as one of a number of setting conditions for the development of eating problems and intrafamilial and extrafamilial experiences differentially affect the type of symptomology exhibited. For example, it was found that bulimia was not associated with intrafamilial sexual experiences.

The EAT was used to assess disordered eating. It was developed and validated by Garner & Garfinkel in 1979. Their subjects were selected from two independent groups. One was female anorexic patients with an average age of eighteen. The other group was a normal control group of undergraduate students in the same age group. The validity of items was determined by the degree to which the item scores were predictive of group membership. The final version of the EAT had a Likert format with extreme responses, in the "anorexic" direction receiving three points and adjacent alternatives receiving two points. Since the recovered anorexics scored in the normal range it was concluded that the EAT is sensitive to clinical remission. This is important for the present study - since it is a non clinical sample some subjects may be in remission.

The EAT was first validated for anorexics and normals and then for males within average weight and female obese subjects (>fifteen percent over average weight). The female obese and male subjects scored significantly lower than the anorexics on the EAT. Results from Garner & Garfinkel (1979) indicated mean scores for the anorexic group (58.9), the normal group (15.6), males (8.6), obese females (16.5), and recovered anorexics (11.4). Garner & Garfinkel (1979) validated the EAT for anorexics; Gross, Rosen, Leitenberg & Willmuth (1986) validated the EAT for bulimics; and the French authors Gauthey & Wagon (1987) validated with a nonclinical population.

In order to investigate the hypothesis that maternal behavior is associated with disordered eating nine questions were added to the EAT. These questions were taken from the EAT and phrased so that the subject could answer them for their mother. By doing this, the child's perception of mother's weight was studied.

In the present study, the SEQ (Russell, 1983) served as a measure of sexual abuse. Russell studied interviewed reports of sexual abuse in 930 females and as a result developed the SEQ. Subjects went through sixty-five hours of intensive training including education on rape and desensitization to sexual words. This was done before the interviews in order to encourage good rapport and prevent under disclosure of sexual events.

Extrafamilial and intrafamilial sexual abuse were studied. Extrafamilial sexual abuse was defined as any unwanted sexual experience by someone unrelated by blood or marriage. Intrafamilial sexual abuse was any kind of exploitive sexual contact that occurred between relatives, no matter how distant the relationship, before the victim turned eighteen. The interviews used a strict and a broad definition for extrafamilial and/or intrafamilial sexual abuse. The strict definition involved contact abuse such as petting or genital sex. The broad definition included non-contact abuse such as exhibitionism and sexual advances not acted upon. Under the strict definition thirty-eight percent reported sexual abuse before age eighteen and twenty-eight percent before age fourteen. Under the broader definition fifty-four percent experienced sexual abuse before age eighteen and forty-eight before age fourteen.

In the present study four questions were specific to the type of abuse (ie. sexual intercourse, exposing genitals, etc.). However, the remaining questions ask about "any unwanted sexual experience". Since some questions were specific by defining what was meant by the sexual abuse these definitions may be kept in mind. However, most questions allow the individual to define sexual abuse according to their own definition. There is an advantage to this. Since this study hypothesizes that abuse leaves an individual vulnerable to develop eating disorders, it is important to let them answer according to what they subjectively view as a disturbing sexual experience.

Six of the fourteen questions on the SEQ specify age. Russell used age fourteen for these. The present study used age eighteen, because it is the age of consent in many states and it is also the age specified in the Child Abuse and Neglect reporting statute. The rest of the questions were asked for "any time in your life".

One limitation of the present study was its reliance upon accurate self disclosure. Many individuals repress their experiences or are unwilling to disclose them to a stranger. Russell's study used interviews which allowed for a good rapport and a personal approach. The present study used self-report questionnaires. Although the rapport of Russell's interviews is lacking here, subjects may be equally willing to disclose since they remain anonymous.

Methods

Subjects:

The subjects were 89 undergraduate, introductory psychology students at Ursinus College. There were 44 male and 45 female subjects. The mean age was 19 with a range from 17 to 22.

Procedure:

A composite questionnaire packet was administered during a class period to the 89 male and female subjects. The experimenter was present and collected the questionnaires as they were finished.

The EAT (Garner & Garfinkel, 1979) is a forty item, Likert format self report measure. The EAT was validated by Gardner and Garfinkel, 1979; Gross, Rosen, Leitenberg and Willmuth, 1986; and Carrot, Lang, Esteur, Pellet, Gauthy and Wagon 1987. It was used to determine the presence and the extent of eating disorders for each subject. Nine "Mother" questions were designed for this study to measure subject's perception of maternal weight conflicts. These items were taken from the EAT and reworded to reflect perceived maternal experience. For example, "Is aware of the calorie content of foods she eats."

The SEQ (Russell, 1983) is a fourteen item self report measure with a response choice of yes or no. It measures the amount and types of unwanted sexual experiences for each subject. The SEQ was validated by Calam and Slade, 1987 and 1989; Palmer, Oppenheimer, Dignon, Chaloner, Howells, 1990; and Calam, 1986. Three questions were added to this questionnaire concerning physical abuse.

Results

Mother items with EAT items (correlations for all 89 subjects, male & female)

There were several significant relationships between perceived maternal food related habits and children's food related habits and

attitudes. Mothers who prepared food, but did not eat what they prepared appeared to have a great effect on their children's eating experiences. Their children reported that they felt anxious about eating ($r = .27, p < .01$), felt guilty after eating ($r = .26, p < .01$), felt bloated after eating ($r = .35, p < .001$), exhibited greater than normal dieting behavior ($r = .30, p < .01$), believed that they thought too much about eating ($r = .35, p < .001$), and felt that others pressured them to eat more ($r = .26, p < .01$). Mothers who were more likely to have children who ate diet foods ($r = .34, p < .001$), felt uncomfortable after eating sweets ($r = .30, p < .01$), were preoccupied with food ($r = .59, p < .001$), and avoided eating when hungry.

Mothers who were reported to weigh themselves several times a day were likely to have children who weighed themselves daily ($r = .27, p < .01$), were anxious about eating ($r = .29, p < .01$), feared becoming fat ($r = .26, p < .01$), avoided eating when hungry ($r = .31, p < .01$), were preoccupied with food ($r = .26, p < .01$), felt bloated after meals ($r = .34, p < .001$), felt guilty about eating ($r = .31, p < .01$), ate diet foods and dieted ($r = .34, p < .01$), believed they gave too much thought to eating ($r = .37, p < .001$), and felt uncomfortable after eating sweets ($r = .45, p < .001$).

Mothers who were perceived as being calorie aware tended to have children who weighed themselves daily ($r = .27, p < .01$), exercised to burn calories ($r = .30, p < .01$), ate diet foods ($r = .27, p < .01$), and were preoccupied with fat ($r = .37, p < .001$). Mothers who were seen as being overweight were more likely to have offspring who vomited after eating ($r = .29, p < .01$), were preoccupied with fat ($r = .41, p < .001$), and disliked clothes to fit tightly ($r = .28, p < .01$).

Sexual Abuse (for all 89 subjects)

Reported sexual abuse was significantly associated with scores on several of the EAT items. Subjects who, as children, were forced to touch someone's genitals were more apt to be preoccupied with becoming fat ($r = .26, p < .01$). Subjects who were forced to have intercourse before 18 were more preoccupied with fat ($r = .40, p < .001$), and tended to dislike rich foods ($r = .27, p < .01$). Subjects who were raped were more likely to avoid carbohydrates ($r = .27, p < .01$). Subjects who narrowly missed a sexual assault showed more tendency to prepare foods, but not eat what they prepared ($r = .32, p < .01$) and were more preoccupied with food ($r = .27, p < .01$).

Sexual Abuse and Mother items

Several correlations were found between Mother items and sexual

abuse in female subjects. Intrafamilial abuse of daughters was associated with mothers who dieted ($r = .35, p < .01$) and mothers who were preoccupied with fat ($r = .48, p < .001$). Violent sexual abuse was correlated with mothers who weighed themselves several times a day and mothers who ate diet foods ($r = .38, p < .01$). Females who reported having been grabbed were more likely to have mothers who were preoccupied with fat ($r = .35, p < .01$).

Physical Abuse

Among males, physical abuse was significantly related to a few EAT items. Both physical abuse by mothers and a history of episodes where teachers questioned bruises were associated with a tendency to feel bad after eating sweets ($r = .38, p < .01$; $r = .68, p < .001$, respectively). Those son's whose teachers had questioned their bruises were also more likely to fear being fat ($r = .40, p < .01$).

Only one EAT item was significantly related to physical abuse for the sample as a whole. Subjects with extreme bruises reported that they did not enjoy eating sweets ($r = .35, p < .001$).

Total Scores (EAT, Sexual Abuse, Physical Abuse, Mother items)

Summary scores on the EAT, the two abuse scales, and the mother scales were calculated for all subjects by totaling the relevant directionally adjusted items. The overall EAT score was not significantly correlated with sexual or physical abuse, but was correlated with mothers who prepare, but do not eat the foods that they prepared ($r = .30, p < .01$).

The overall Physical Abuse score was correlated with intrafamilial sexual abuse ($r = .45, p < .001$), sexual assault ($r = .39, p < .001$), sex ($r = -.27, p < .001$), and age ($r = .38, p < .001$), indicating more physical abuse of males.

The total score for the Mother items was associated with anxiety about eating ($r = .26, p < .01$), feeling bad about eating sweets ($r = .32, p < .01$), and having others pressure them to eat more ($r = .30, p < .01$).

Laxative Use

Subjects who reported a use of laxatives were more likely to endorse several items on the questionnaire. These subjects were more likely to have the following: preoccupation with food ($r = .26, p < .01$), avoiding eating when hungry ($r = .36, p < .001$), the impulse to vomit after meals ($r = .35, p < .001$), mothers who dieted ($r = .26, p < .01$), mothers who weighed

themselves daily ($r = .53, p < .001$), mothers who were heavy ($r = .37, p < .001$), mothers who were preoccupied with fat ($r = .34, p < .001$), upsetting experience of someone exposing their genitals and a history of physical abuse by mothers ($r = .26, p < .01$), episodes where teachers questioned bruises ($r = .41, p < .001$). These scores were higher on both the overall and the Physical Abuse Scale ($r = .28, p < .01$).

Males showed positive correlations between laxative use and mothers who prepared foods, but did not eat what they prepared ($r = .40, p < .01$), mothers who were calorie aware ($r = .37, p < .01$), mothers who were heavy ($r = .50, p < .001$), and mothers who exercised to burn calories ($r = .62, p < .001$).

Discussion

The most interesting findings that emerged from this study involved relationships between food related behaviors and attitudes and subjects' perception of their mothers. Several maternal behaviors were strongly associated with disordered eating in both daughters and sons. Mothers who were perceived as being preoccupied with fat, food, and weight were more likely to have children who exhibited eating disordered behaviors and attitudes. This may be because the child models the eating behaviors of the mother. It is also plausible that the child with a food related disorder has an altered perception of the mother. The child may perceive the mother as exhibiting disordered behaviors and attitudes concerning food as a consequence of the projection of their own pathology. A third possibility is that a child's eating disorder could influence the mother's actual behavior and attitudes. In this scenario, the child's behavior could elicit greater diet consciousness or feeding behavior on the part of the mother.

The first notion, that children acquire their mothers' disordered eating behaviors and attitudes through observational learning, is consistent with the findings of Pike and Rodin (1991). Their study showed that mothers of daughters with disordered eating had a longer dieting history and were more eating disordered themselves, but found no mean weight difference between mothers of disordered and normal daughters. The most salient differences between the mothers of eating disordered daughters and the mothers of nondisordered daughters concerned the mothers' attitudes towards their daughters' weight and appearance. The mothers of eating disordered daughters were very

critical of their daughters weight and appearance. In this regard, these mothers may be pressuring their daughters to lose weight and adopt their excessive weight consciousness. The mother-daughter relationship appears to contribute significantly to the development of the daughters' eating disorder.

In the present study, several of the mother items were significantly correlated with subjects' EAT, sexual abuse, and physical abuse scores. Mothers who dieted and, in general, were viewed as being overly aware of food, dieting, and weight, appeared to have considerable influence on their children. Both their male and female children were more preoccupied with fat, food and weight. Mothers who were perceived as being overweight tended to have children who induced vomiting, wore loose fitting clothes, and were preoccupied with fat. This may demonstrate either the child's concern about being heavy like their mother, or the perceptual distortion of the child with a food related disorder.

For females, maternal dieting and preoccupation with fat were significantly associated with sexual abuse. A mother's sexual withdrawal from her spouse may enhance a daughter's risk for sexual abuse. A mother who is over or underweight may not appear sexually attractive to her spouse or may be overly inhibited and consequently avoid sexual intimacy. This may increase the likelihood of a father to abuse his daughter. Thus, the mother's weight problems may mediate the father-daughter relationship. In response to the sexualization of her relationship with her father the daughter may attempt to alter her body image. This study found that subjects who experienced some form of sexual abuse were more preoccupied with fat and food and wore loose fitting clothes. This provides some support for the hypothesis that subjects who experience abuse are more inclined to develop eating disorders. Some sexually abused subjects were preoccupied with food and avoided carbohydrates. Perhaps they were trying to transform their body into a thin, childlike, asexual figure. Others wore loose fitting clothes, thus hiding their bodies.

The failure to find any significant correlates with physical abuse in females may have been due to an extremely low rate of physical abuse in females. Both sexual and physical abuse in males were correlated with some of the EAT items. This might suggest that any experience which strongly threatens an individual's sense of control may be predisposing to disordered eating. Further studies using larger samples of abused

individuals would help to clarify the question of whether physical abuse affects the sexes differently.

The total EAT score was not significantly correlated with sexual or physical abuse. This may have been due to the relatively low number of abused subjects in this sample and to subclinical levels of eating disordered subjects in this study.

Another striking finding concerned the correlates of laxative use. The results of this study draw attention to this behavior. Several EAT items, mother items, as well as sexual and physical abuse items correlated significantly with laxative use. In nonclinical samples, laxative use may serve as a marker for several different historical variables associated with negative body image and concerns about control.

These findings may be useful in clinical analysis of disordered eating. A history of abuse should be investigated when a patient has an eating disorder. Furthermore, preventive efforts may help target children who are at risk of future disordered eating. Additionally, a clinician working with clients with eating disorders may wish to consider the client's perception of their mother's eating habits. This may be where the client learned his/her eating disordered habits. Awareness of their maternal influences might help the client to understand their own attitude more fully and ultimately lead to a greater capacity for change and self control. Additional studies should be conducted to clarify the extent to which mothers may unknowingly contribute to their child's eating disorder. A longitudinal design would help to establish the direction of causality.

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