

THE RELATIONSHIP OF PSYCHOSEXUAL FACTORS
AND EATING DISORDERS

by

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(ABSTRACT)

The research presented here is an exploratory investigation of the potential role of psychosexual factors in the development of the eating disorders anorexia and bulimia. The study sample involved 41 female eating disordered patients (16 anorexics and 25 bulimics), diagnosed using the DSM-III-R criteria. These patients were recruited from The Eating Disorders Program at St. Albans Psychiatric Hospital in Radford, Virginia. Five hypotheses were tested concerning the following psychosexual factors: sexual knowledge and attitudes; sexual experience and functioning; sex roles; gender identity (sexual orientation); and history of sexual abuse or incest. The hypotheses postulated that the psychosexual factors would exist or be perceived by eating disordered patients as significantly different than would be statistically expected according to available normative data. The instrumentation for measuring these factors included the Derogatis

Sexual Functioning Inventory, the Bem Sex Role Inventory, and the Klein Sexual Orientation Grid. Compared to normative data, significant results were found in the total sample for all psychosexual factors except Sexual Knowledge and Gender Identity. However, no significant differences were found between the anorexic and bulimic subsamples. These results are discussed along with their implications for therapy and research.

DEDICATION

To my mother, Kay

Who taught me the meaning of sacrifice,
struggle and caring.
I never doubted she was there.

and

To Ann Settle

Even in her death, as she did in life,
she inspired more love among people
than the boundaries of human spirit
have allowed most other people to ever know.

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CHAPTER I

INTRODUCTION

Perhaps one of the more interesting and dangerous paradoxes society imposes on itself is the one involving an obsession with body weight and size. The dilemma exists because, in the name of health, many people relentlessly pursue physical fitness, and the loss of what they consider to be "fat," to the point of actually sacrificing the goal originally sought: health (Bennett & Gurin, 1982; Brody, 1986). In truth, health is rarely the only motivation for dieting and exercise, though this is usually the ultimate rationalization. Other reasons include improved self-esteem and social desirability. The multi-billion dollar weight-loss industry that exists today, prospers because of its ability to capitalize on a cultural insecurity and paranoia about fatness. Further, society helps to create and perpetuate this condition through media projection and modeling of unrealistic goals and ideals for the "perfect" body image. This exploitation is evident by the significant financial successes experienced by each new diet on the market, even the passing fad diets, some of which have been

shown to have seriously harmful effects on health, (e.g., see Garner & Bemis, 1985; Bennett & Gurin, 1982, or Wooley & Wooley, 1982, for a discussion of the Beverly Hills Diet). As a result, the extra-ordinary measures some people will go through to achieve their weight loss goals often lead to eating disorders such as anorexia ("self-starvation") and/or bulimia ("the binge-purge syndrome").

In addition, there also seems to be an unfortunate glamorization process of some eating disorders perpetuated by media attention. For instance, despite the possibility of life threatening consequences, some well known people such as Karen Carpenter who eventually died of complications from anorexia nervosa and ipecac abuse, have been credited with having the extraordinary determination and personal discipline needed to achieve incredible weight loss goals. As a sad result, it is possible that some young people, overly concerned with weight and body image, may develop "copycat" symptoms of anorexia or bulimia as they try to imitate some of their favorite idols. Also, as indicated by the gender differences within percentages of eating disorders, women fall prey to this negative social pressure

and conditioning more often than men (Boskind-White & White, 1983; Garner, Garfinkel & Olmsted, 1985; Gray & Ford, 1985; Schesier-Stropp, 1984; Scott, 1986).

Cross-culturally and historically, contemporary American society seems to value in the ideal female figure a stereotype that contrasts with what some other societies value. In particular, there are some South Pacific and African cultures that value fatness the same way Americans value thinness: as an ideal goal to be strived for--perhaps as a measure of health, prosperity and success (Francouer, 1983; Garner, Garfinkel & Olmsted 1983). Furthermore, in American culture, the norms of healthy and attractive female figures have changed in opposition to cultural ideals and expectations since the early part of this century. Specifically, the average size and weight of women in this country has increased as popular images of the ideal, as judged by Miss America Pageant winners and Playboy centerfold models, have significantly decreased in size and weight (Garfinkel & Garner, 1982).

Finally, the health threats of being slightly overweight as judged by insurance tables, have been greatly

misrepresented, exaggerated and sensationalized in the popular press. Outside of possibly being unfashionable, the potential health benefits of being slightly overweight by the apparent media standard have hardly been explored or publicized (Bennett & Gurin, 1982; Brody, 1986).

It should be noted that the sociocultural perspective is considered to be only one set of factors involved in the complex etiological spectrum of eating disorders. Thus, the purpose of this research project was to investigate and explore possible causal factors in the development of eating disorders. Specifically, as will be explained in detail in the next two sections, the purpose of this study was to examine the potential role of psychosexual factors in the etiology of anorexia and bulimia.

Definitions

Currently, researchers and clinicians have difficulty establishing consensus or standard definitions for anorexia or bulimia. This is because of the inconsistency of the use of the terms in the literature on eating disorders and because clinical observations often differ from research definitions and the DSM-III (1980)

criteria (Ratcliff, 1986; Schlesier-Stropp, 1984). One problem is when amenorrhea is used as a diagnostic criterion for anorexia, it makes the classification of male anorexia confusing and inconsistent (Scott, 1986).

Another problem involves the disagreement by some researchers about whether bulimia is a separate clinical entity or a subclass of anorexia (Garfinkel, Maldofsky, & Garner, 1980). Further, without the requirement of "purging" for classification of bulimia, strict adherence to the DSM-III (1980) criteria created difficulty in distinguishing between bulimia and compulsive eating (Ratcliff, 1986). Some researchers have dealt with these problems of definition and diagnosis by combining syndromes and labeling it "bulimarexia" (Boskind-White & White, 1983). Others (e.g., Garfinkel et al., 1980; Ratcliff, 1986; Schlesier-Stropp, 1984; Vandereycken & Meerman, 1984), have suggested that eating disorders exist on a continuum:

Anorexia-----	Anorexia-----	Bulimia----	Compulsive Eating
Nervosa	w/ Bulimia	Nervosa	(Binge eating w/o
(Restricting	(Restricting	(Binge eating	purging)
w/o purging)	w/ purging)	w/ purging)	

For the purposes of this dissertation, the definitions of anorexia and bulimia will be based on the DSM-III-R (Revised, APA, 1987) criteria, and expanded to include descriptions currently found in the literature. For further discussion of the definitions of anorexia and bulimia and their associated characteristics, the reader is referred to any of the following: Brown and Foreyt (1986), Emmett (1985), Garner and Garfinkel (1985).

The DSM-III-R (APA, 1987) criteria used in defining Anorexia Nervosa are as follows:

- A. Intense fear of becoming obese, even when underweight.
- B. Disturbance in the way in which one's body weight, size, or shape is experienced, e.g., claiming to be fat even when emaciated; belief that one area of the body is too fat even when obviously underweight.
- C. Refusal to maintain body weight over a normal minimum weight for age and height; weight loss of 15% or more of expected normal body weight; failure to make expected weight gain during periods of growth.
- D. In females, absence of a least three consecutive menstrual cycles otherwise expected to occur (primary

or secondary amenorrhea).

The DSM-III-R (APA, 1987) criteria for defining Bulimia Nervosa are as follows:

- A. Recurrent episodes of "binge-eating" (rapid consumption of large quantities of food in relatively short discrete periods of time, usually less than 2 hours).
- B. During the eating binges, there is a feeling of lack of control over the eating behavior.
- C. The individual regularly engages in either self-induced vomiting, use of laxatives, strict dieting, fasting, and/or vigorous exercise, usually following a binge-eating episode in order to prevent weight gain.
- D. A minimum average of two binge-eating episodes per week for a period of at least three months.
- E. Persistent overconcern with body shape and weight.

For the bulimic person, anxiety, depression and/or self-deprecating thoughts usually precede, but may be amplified following binge eating episodes. Considered by some to be an attempted coping response, temporary relief of this stress may be attained through purging behaviors, but being short lived, the bulimic's sense of ineffectiveness

and low self-esteem become self-reinforcing. The pervasive underlying feelings of these behaviors also include fear of fatness and loss of control, especially of the binge eating and purging. Eventually, these thoughts, feelings and behaviors prove to be cyclically self-perpetuating to the point that the behaviors often take on an obsessive-compulsive quality.

Typically, both anorexics and bulimics have poor body images and have a long history of dieting and weight loss attempts, possibly with some degree of short term successes (Garner, Rochert, Olmsted, Johnson, & Coscina, 1985; Ratcliff, 1986). Eventually, however, at least in the case of bulimia, all the lost weight is usually regained, often with some additional weight gain. This result is due to the physiological and metabolic changes in a body that is responding to the threat of starvation (Bennett & Gurin, 1982; Fairburn, 1985; Garner & Bemis, 1985; Weiner, 1985).

In addition to being possible coping responses to anxiety and/or depression, anorexic and bulimic behaviors (restricting, binge eating, purging) may also be part of the distance regulating mechanism of some anorexics and bulimics

who commonly display poor social skills as well as strained and disengaged social and romantic (intimate and/or sexual) relationships (Garfinkel & Garner, 1982; Garner & Bemis, 1985; Herzog, Keller, Lavoie, & Ott, 1987; Schlesier-Stropp, 1984; Scott, 1987). In general, additional individual characteristics of anorexics and bulimics may include the following: perfectionism, striving to control, fear of own incompetence, and poor perceptive abilities of internal states, e.g., hunger or anger (Garfinkel & Garner, 1982; Garner & Garfinkel, 1979, 1985; Garner & Olmsted, 1984). There is also a strong need for acceptance and approval, which is often reflected in exaggerated presentations of pleasantness and extraordinary efforts to please others (Bayer & Baker, 1984; Cattanach & Rodin, 1988; Prather & Williamson, 1988; Strauss & Ryon, 1988). Clinically, this tendency to be "pleasing" has often been observed to be masking deeper levels of anger, resentment, and overall rigidity and resistance to change (Bayer & Baker, 1984; Garfinkel & Garner, 1982; Weisberg, Norman, & Herzog, 1987).

In the family context, according to Minuchin, Rosman, and Baker (1978), and Schwartz, Barrett, and Saba

(1985), eating disordered behaviors may provide an attention-getting sick role which serves as a triangulating or conflict avoidance mechanism in the often observed highly enmeshed and rigid relationships of families of bulimics. Noted in such families is an inability to relate or communicate feelings, especially anger, as well as escalating power struggles. There is a general distrust of outsiders and a marked difficulty in successfully launching older children. The parents tend to be overprotective and have high unrealistic expectations of the children, especially the identified patient. These families tend to be socially isolated, but also extremely appearance conscious and success oriented. Many families with members who have eating disorders also tend to attach special meaning to food and eating, in which case the anorexic and bulimic behaviors may function as a form of passive-aggressive rebellion or covert defiance of the family structure, which further inhibits successfully leaving home, by functionally prohibiting the structure from changing.

It should be noted that the picture presented here

of eating disorder patients and their families, represents the extremely dysfunctional end of a pathological continuum. This generally accounts for much of the clinical or hospitalized proportion of the eating disorder population. However, researchers like McVoy (1986), Sargent (1986), and Vandereycken (1987), have been outspoken in their position against an exclusive family focus or family therapy approach to the multidimensional problems of eating disorders. Though an important component, these authors suggest that such an exclusive focus would often result in ineffective treatment since eating disorders are multidimensional in nature and require multimodal approaches to treatment.

Overall, anorexia and bulimia have also been noted in individuals who display none of the above psychological characteristics and come from families with none of the dysfunctions previously described. In other words, people who can be described as "normal" can also be afflicted with anorexia or bulimia, though they may be less likely to come into contact with clinicians or researchers. Finally, there is still some question as to whether the current research has been able to distinguish between cause and effect.

There are many theories concerning the etiology of eating disorders in the research literature, some of which will be discussed in the sections that follow. However, as an introduction at this point, it is noted that the eating disorder literature has consistently postulated several theories about the casual role of psychosexual factors in the development of eating disorders. Many of these causal explanations have been at least partially substantiated by clinical observation and single case sample data, but not by empirical data (Scott, 1987). Thus, part of the rationale for this study was to help fill the gap in the empirical data which would test the relationship of psychosexual factors to eating disorders. Accordingly, these factors will be defined to include the following:

1. Sexual knowledge and attitudes.
2. Sexual experience, functioning and satisfaction.
3. Sex role (degree of masculinity vs. femininity)
4. Sexual identity (sexual preference).
5. History of any possible sexual abuse or assault.

Significance of Problem

Establishing accurate estimates of the incidence and

prevalence of eating disorders has been difficult for several reasons. First, as already mentioned, problems exist in consistently defining syndromes of eating disorders in the research literature. Second, many eating disorders, bulimics in particular, are extremely secretive in their behaviors and often go undetected (Johnson & Connors, 1987). Also, an individual with bulimia may appear to be of normal body weight and without distress. Moreover, because of a strong need for acceptance and approval, many eating disorders may go undetected in large scale research projects in the general population which employ the use of self-report measures that do not include social desirability or lie scales. Finally, most research samples have omitted males, perhaps because of their rarity, from consideration and statistical analysis.

Overall, the incidence of eating disorders in the general population is largely unknown, though some researchers have estimated the incidence of eating disorders in the U.S. to be approximately 2.5% of all women (Garfinkel & Garner, 1982). Additionally, the research literature currently estimates the prevalence of varied eating

disorders to be between 4% and 20% in most female college populations and is believed to cut across racial and SES boundaries (Crowther, Post, & Zaynor, 1985; Garfinkel, 1981; Gray & Ford, 1985; Halmi, Falk, & Schwartz, 1981; Hart & Ollendick, 1985; Leon, Carroll, Chernzk, & Finn, 1985; Nevo, 1985; Pyle, Mitchell, Eckert, Halvorson, & Neumann, 1983; Ratcliff, 1986; Schlesier-Stropp, 1984).

The seriousness and significance of the problem of eating disorders in the population is underscored by the potential of medical complications and long term health consequences which includes the possibility of death. For anorexics, short of a fatal outcome, this starvation condition can result in permanent neurological or muscular damage (including the heart), cardiac arrhythmias, bradycardia, hypotension, anemia, toxic blood urea nitrogen retention, renal calculi, alteration of chemical brain functioning, metabolic changes, damage to the internal organs, delayed gastric motility, hypothyroidism, alteration of endocrine functioning and the reproductive system, changing or eliminating the menstrual cycle (estrogen deprivation), and possible skeletal disfiguration, growth

failure or osteoporosis (APA, 1987; Fairburn, 1985; Garfinkel & Garner, 1982; Garner & Bemis, 1985; Gross, 1984). In addition, male anorexics may have decreased gonadotropin secretion and depressed serum testosterone levels, leading to impotence and decreased libido (APA, 1987; Oyeboode, Boodhoo, & Schapira, 1988).

As for bulimia, binge eating may result in gastric distention, but the serious complications generally result from the purging (vomiting, high acid content), purgative and/or laxative abuse. This type of substance abuse can be addictive and additive, and may result in toxic poisoning. Rupture of the esophagus (or G.I. pathway) is rare, but possible and potentially fatal. The most common outcome is the loss of body fluids and electrolytes (e.g., potassium). This can result in hypokalemia (kidney infection and failure), metabolic changes, or cardiac arrest (Johnson & Connors, 1987; Fairburn, 1985; Weiner, 1985). In addition, bulimics often report having abraded knuckles from induced vomiting (Russell's sign), sore throats, swollen parotid (salivary) glands, and severe dental deterioration (Schesier-Stropp, 1984). If the bulimic is also a drug or

alcohol abuser, vomiting may occur during impaired consciousness, causing aspiration pneumonia (Herzog & Copeland, 1985).

In the area of treatment effectiveness and outcome research, temporarily bypassing the problems in non-comparable definitions, diagnosis and outcome measures; cognitive-behavioral approaches have emerged as having the single most potential for effectiveness (defined as ceasing symptoms; Lee & Rush, 1986). However, the best results (based on the percentage of "successful" outcomes at treatment termination and follow-up), have been achieved in programs which combine individual, group and family therapies (Brownell & Foreyt, 1986; Emmett, 1985; Garner & Garfinkel, 1985; Gilchrist, McFarlane, McFarlane, & Kalucy, 1986; McVoy, 1986; Sargent, 1986; Schesier-Stropp, 1984; Vandereycken, 1987).

Theoretical and Clinical Hypotheses

Many different factors have been implicated and researched as correlates or possible causal factors in the pathogenesis of eating disorders. These include SES and sociocultural factors (Garner, Garfinkel, & Olmsted 1983; Boskind-White & White, 1983), familial factors (Kog, Vandereycken, & Verommen, 1984; Minuchin et al., 1978; Ordman & Kirschenbaum, 1986; Rakoff, 1983; Radcliff, 1986; Schwartz et al., 1985), developmental and biological changes in adolescence (Crisp, 1980, 1983; Garfinkel & Garner, 1982), coping responses, skills and strategies (Leon et al., 1985; McLaughlin, Karp, & Herzog, 1985; Mitchell, Davis, & Goff, 1985; Ratcliff, 1986), personality and characterological factors which may or may not be associated with affective disorders (Cantwell, Sturzenburger, Burroughs, Salkin, & Guen, 1977; Dunn & Onducin, 1981; Ordman & Kirschenbaum, 1986; Pertschuk, Collins, Kreisberg, & Fager, 1986; Viesselman & Roig, 1985) and even neurophysiological and endocrinological factors (Calloway, Fornagy, & Wakeling, 1983; Darby & Garfinkel, 1983; Weiner, 1986).

Varying degrees of evidence have been found for the hypotheses associated with these factors (see Brownell & Foreyt, 1986; Emmett, 1985; Garner & Garfinkel, 1985). As for a genetic or biological predisposition for eating disorders, definitive or conclusive evidence has yet to emerge in the literature. However, the relationship of eating disorders to organic affective disorders has received a lot of attention. High incidences of organic affective disorders have been found in the family histories of eating disorder patients and this potentially indicates a biological link or predisposition for the development of an eating disorder (Johnson & Connors, 1987). Other supportive evidence of a connection between eating disorders and affective disorders include similarities in vegetative states, parallels in sleep disturbances, and positive responses in eating disorders to antidepressant medication (Dunn & Onducin, 1981; Herzog & Copeland, 1985).

Following a developmental perspective, many hypotheses exist surrounding psychosexual factors and the crisis of the hormonal and physical changes of entering adolescence. These have either been neglected in the

research literature or have been shown to be based on inconclusive data and evidence (Dickstein, 1985; Scott, 1987). For instance, some researchers grounded in psychoanalytic theory (e.g., Russell, 1970; Sours, 1980), have postulated the following causal description of eating disorders:

1. A defense mechanism not directed against external anger, but against the developmental process of puberty.

2. A regression so that the patient abandons the genital-sexual stage of development and sexual impulses vanish from consciousness.

3. "Fixation at an oral level" so that thought is dominated by food and hunger.

4. Striving toward an ascetic ideal and an asexual life. "There would appear to be a perpetual struggle to escape from guilt and anxiety; abstinence from food may serve as self-punishment; they may also seek to protect and feed other members of their families or other patients" (Russell, 1970, p. 138).

One logical extreme of this theoretical perspective is that female anorexics in particular, trying to cope with,

or rather avoid dealing with unresolved conflicts (i.e., Oedipal) by abstaining from eating food, may have the conscious or unconscious wish to be members of the opposite sex and therefore will struggle to lose their secondary female sexual characteristics through starvation. This may be due to such factors as familial pressures (e.g., possibly covert or overt parental wishes for a son instead of a daughter), or the anorexic, by losing disproportionate amounts of weight, may be unconsciously trying to make herself more attractive to members of the same sex. Thus, in such cases it would not be unexpected for such individuals to be experiencing some degree of sexual conflict in terms of a potential transsexual, homosexual, or bisexual orientation (Scott, 1986, 1987).

Less extreme than postulating sexual conflict, researchers like Crisp (1980) viewed the changes in physical appearance, sexual characteristics, social relationships and family interactions during puberty and adolescence as extremely fearful and anxiety producing events. Thus, eating disorders evolve as avoidance mechanisms to these events (Crisp, 1977, 1980), or within the family, may represent a

triangulation of conflictual interactions (Minuchin et al., 1978; Schwartz et al., 1985).

In addition, Bruch (1973, 1978) has stated that potential eating disorders are subjected to conflicts over independence and responsibilities expected or demanded in adolescence and adulthood. Being emotionally unwilling or unprepared for autonomy, the development of an eating disorder is an attempt to retreat from such demands. Bruch also states that anorexic patients in particular, show little interest in heterosexual relationships and are resistant to learning about sexuality. In agreement, Beumont, Abraham, & Simson (1981), quote the following: "The libidinous feelings attending sexual maturation along with their potential for consummation in an extrafamilial and heterosexual relationship, are the core issues around which fears evolve" (p. 131).

It should be noted that the developmental crisis hypothesis is more often made in reference to anorexics than bulimics, (Crip, 1983; Schlesier-Stropp, 1984). This is also relevant to the observation that the average age of onset for female anorexia is early adolescence, (Garfinkel, 1981;

Garfinkel & Garner, 1982).

Alternatively, the observations of Casper and Davis (1977) lead them to believe that eating disorders begin from normal dieting behaviors in adolescence that were intended to increase one's attractiveness to the opposite sex, but which got out of control. Crisp (1980, 1983), however, viewed a typical eating disorder patient's obsession with food (especially in female anorexics) as not representing desire for increased sexual attractiveness, but as aversion to her attractiveness and feminity. Her aversion to carbohydrates then, is seen as an aversion to the building blocks of her own hips and breasts, and the beginning of her menstrual cycle. Still others (e.g., Dunn & Onducin, 1981; Garfinkel & Garner, 1982; Gross, 1982) have stipulated that these observed differences in the function, motivation, and intention of extreme dieting or eating disordered behaviors (i.e., the desire to increase one's sexual attractiveness as opposed to avoidance of intimate/sexual relationships and one's own sexuality) are precisely the factors which distinguish between normal dieting adolescent women and eating disorders such as restricting adolescent anorexic

females. In possible support of this contention, other clinical observations have noted that the onset of both anorexic and bulimic eating disorders have often coincided with the persons first significant sexual experience (Beumont et al., 1981; Lacey, Coker, & Birtchnell, 1986; Scott, 1986, 1987).

Other contemporary psychosexual hypotheses include the possibility of gender role conflicts and strain in persons with eating disorders. For instance, based on clinical impressions, Boskind-Lodahl (1976) suggested that females with anorexia are rejecting traditional feminine characteristics, roles and expectations, whereas bulimics tend to over-identify with the traditional feminine role. Specifically, bulimics would accept the passive, dependent stereotypic female role and would not question the premise that wifhood, motherhood, intimacy with men and pleasing others were basic components of their femininity. This has become known as the "hyperfemininity" hypothesis. However, it is emphasized that these clinical impressions of sex role conflicts were not compared to normal controls nor to males diagnosed with eating disorders to see if they may be

experiencing similar conflicts, i.e., the rejection of their own masculinity. In fact, Boskind-Lodahl (1976), was able to recruit 138 self-selected volunteers by advertising in the Cornell college newspaper specifically for women "caught in" and wishing to break their cycle of fasting, binge eating and/or self-induced vomiting.

In a similar but contrasting vein, Orbach (1978) and Sitnick and Katz (1984) have offered the hypothesis that anorexic women both reject and exaggerate the feminine role. Although the anorexic often lacks prominent secondary female sex characteristics due to starvation, she also has become excessively petite, fragile and perhaps passive and pleasing in nature (other than refusing to eat). Therefore, symptoms of anorexia may be viewed as a subconscious defiance or passive-aggressive rebellion against feminine roles and expectations. Equally, the binge eating and purging behaviors of bulimics can be seen as expressions of covert anger, resentment or frustration among women who have been socialized into a traditional feminine role and who are conditioned to suppress any open display of anger. Interestingly, perhaps lending partial support to this

observational hypothesis, Rost, Neuhaus, and Florin (1982), found significant differences in the feminine behaviors bulimics claimed to endorse and their actual behavior. Rost and associates have suggested that this cognitive dissonance or dissatisfaction with one's sex role may have contributed to the development of an eating disorder.

Finally, clinical reports showing a high incidence of some form of sexual assault in the histories of many female eating disorder patients, have indicated that anorexia and/or bulimia may be the outcome of previous sexual abuse, incest or rape (Damlouji & Ferguson, 1985; Finn, Hartman, Leon, & Lawson, 1986; Schechter, Schwartz, & Greenfield, 1987; Scott, 1987). In addition, the literature on sexual assault has postulated that eating disorders may be one of the symptomatic outcomes in the aftermath of sexual abuse (Gelinas, 1983; Russell, 1986; Sgroi, 1982).

Research Hypotheses

Overall, deriving from the clinical and theoretical considerations above, this exploratory research project investigated the following psychosexual hypotheses concerning possible etiological or contributing

factors to the development of eating disorders:

1. Eating disorders patients will experience significantly more negative attitudes and feelings about their sexuality and any possible sexual activity than would be expected statistically. Also, it is expected that eating disorder patients will have had less than typical amounts of sexual information available to them.

2. If sexually active, eating disorders patients will experience significantly more sexual dissatisfaction and sexual dysfunctions (e.g., anorgasmia) than would statistically be expected. In addition, eating disorder patients will perhaps experience more difficulty starting and maintaining intimate relationships than typically expected.

3. Eating disorders patients will experience their perceived sex or gender roles (i.e., feminine vs. masculine) significantly different than available statistical norms would predict. It is unknown at this time whether patients with eating disorders will experience more rejection, conflict, dissatisfaction and/or adherence to their perceived sex roles.

4. Patients with eating disorders will experience significant conflict about their gender identity and sexual preference as it pertains to degrees of denied or accepted homosexuality or heterosexuality.

5. Eating disorder patients will have experienced significantly more sexual assault (incest and rape) in their pasts (prior to the onset of eating disorders), than would be expected in general populations. Other negative sexual experiences are expected to be higher in proportion, e.g., unwanted pregnancies or abortions.

Another important objective of this study was to investigate any potential differences between anorexics and bulimics, regarding the psychosexual factors outlined above. However, no specific research hypotheses concerning these differences were stated prior to data collection and analysis.

It should be noted again that current research has characteristically omitted or neglected the study of male eating disorders. Though this study originally intended to include males, this was not possible due to lack of available subjects. Thus, no hypotheses concerning the

possible differences between male and female eating disordered patients were tested in this study. Perhaps the fact that male eating disorders are rare (<10% of the eating disorder population are estimated to be male), may be another reflection of the bias in definition and diagnosis as well the differential sociocultural pressures experienced by men and women (Andersen & Mickalide, 1983; Crisp & Burns, 1983; Lundholm & Anerson, 1986; Oyebode, Boodhoo, & Schapira, 1985; Scott, 1986; Sterling & Segal, 1985).

CHAPTER II

LITERATURE REVIEW

As stated previously, the research literature addressing the psychosexual hypotheses just outlined is scarce. That which does exist is inconclusive and inconsistent in its support for neither or both sides of each of these issues. The research questions presented here remain open and unresolved.

Regarding the first and second psychosexual hypothesis, involving Sexual Knowledge, Attitudes, Experience, Functioning and Satisfaction (pp. 24 & 25), Beumont and associates (1981) studied extensive psychosexual histories of 31 females with anorexia nervosa and found the following:

1. More than half (21) had a poor knowledge of sexual matters and contraception.
2. The proportions with negative attitudes towards various aspects of sexuality ranged from 23% to 35%. These figures were considered relatively low compared to the combined ambivalent/unsure and positive responses, but were consistent and significant.

- A. Menstruation: 29% negative, but 26% positive.
- B. Marriage: 23% negative, 29% positive.
- C. Pregnancy and childbirth: 35% negative, 35% positive.
- D. Masturbation: 23% negative, 45% positive.
- E. Premarital intercourse: 35% negative, 48% positive.
- F. Homosexuality: 26% negative, 42% positive.

3. Sexual experience: 58% admitted to masturbation; 6% reported having at least one adolescent homosexual experience, and 87% had had at least one boyfriend at some time whom they considered intimate.

Although the majority of the anorexics felt that some sexual challenge (e.g., pressure to have intercourse), had precipitated their illness, Beumont et.al. (1981) found that the overall sexual experience of anorexics was near that of normal females of the same age (from other studies). However, a loss of sexual desire and episodes of no sexual activity often occurred during emaciation for most of the anorexic patients. Nevertheless, Scott (1987) has argued that the consistent, but relatively low figures in this

study is in contrast to clinical observations and indicates a lack of evidence substantiating a greater frequency of abnormalities or conflicts concerning sexuality in eating disorders. It should also be pointed out, however, that it was unclear whether the subjects were asked for general sexual attitudes regarding the behavior of others, or for attitudes and feelings specific to their own sexual behavior.

Similarly, a French research project (Buval-Herbaut, Hebbinckuys, Lemoire, & Buvat, 1983), found that anorexia does not necessarily indicate an absolute rejection of the female body or sexuality, although a fear, refusal or aversion to sexuality was cited as having a causal role in 30-40% of cases, as compared to 21% in the control group. Also, 45% of the anorexic sample was sexually active before the onset of the illness, while 37% remained active during their illness. Caution is urged in comparing and interpreting these results because of probable differences in cross-cultural sexual attitudes and values.

Another study (Cantwell, Sturzenburger, Burroughs, & Salkin, 1977), noted that 17% of 26 anorexic women reported

premorbid sexual promiscuity. In a four year follow-up of 41 female eating disorder patients, Morgan and Russell (1975) found that 23% were clearly abnormal, showing aversion to heterosexual contact, denial of libido, and/or satisfaction at continuing amenorrhea. Poor sexual adjustment in general, was common in low weight patients, although it was also found in one obese patient. Finally, Lacey, Coker, and Birtchnell (1986) studied 50 bulimic women and found that 72% indicated that sexual conflicts (e.g., guilt over intercourse) had precipitated the onset of illness. Also, 78% reported doubts concerning their femininity, and 38% reported poor peer relationships.

As for the third hypothesis concerning sex role conflict, several studies have produced varied and mixed results. Interpretation and comparison are made additionally difficult and problematic because of the use of different measures of sex roles and ideologies.

Using the Bem Sex Role Inventory (BSRI) (Bem, 1974, 1981), Dunn and Ondercin (1981) found that patients with eating disorders did not differ from controls on either the masculinity or femininity scales. Using the short version of

the BSRI (Bem, 1981), Lewis and Johnson (1985) reported that controls scored higher than bulimics on the femininity scale. Even though the authors speculate that this finding may be more indicative of the low self-esteem of bulimics, this still appears to challenge the "hyperfemininity" hypothesis of bulimia originally proposed by Boskind-Lodahl (1976).

Similarly, Timko, Striegel-Moore, Silberstein, & Rodin (1987), using the Personal Attributes Questionnaire (PAQ), found no difference between eating disordered women and controls on femininity scores. However, these authors also found that placing greater importance on possessing socially desirable masculine traits (e.g., self-reliance), was a significant predictor of eating disorders. Further, using the Sex Role Ideology (SRI) scale (Kalin & Tilby, 1978), Sriameswaran, Leichner, and Harper (1984), found no differences between eating disorders and controls on feminine sex role scores, but bulimics were significantly more feminist in their views than anorexics.

Challenging the postulated anorexic rejection of femininity, Squires and Kagan (1985) studied 162 college

women, using the Sex Related Attitudes Test and found that identified anorexics perceived themselves to be high in feminine qualities while bulimics rated themselves as low. However, bulimics expressed greater dissatisfaction with themselves than anorexics and desired to be more feminine than they perceived themselves to be. Dieting and slenderness were considered inherently feminine and desirable by both groups. However, it bears repeating that Rost et al. (1982) found significant differences in the feminine behaviors endorsed by female bulimics and their actual behaviors.

In further contrast, McLaughlin et al. (1985) found that both anorexics and bulimics were self-rated as having significantly more traditional feminine traits than controls. Likewise, Norman and Herzog (1983), found anorexics to be significantly more feminine than controls, and Strien and Berger (1988), found that emotional and physical eating disordered behaviors were related to the adherence to stereotypic feminine traits, not masculine traits.

Again in contrast, Heilbrun and Putter (1986),

reported that anorexics were much less concerned and more likely to reject traditional feminine values. Sitnick and Katz (1984) found no significant difference on BSRI femininity scores between anorexic and control groups, but anorexics scored significantly lower on masculinity scales. This again, may be more reflective of self esteem issues. Baruch and Barnett (1975) have shown that perceiving oneself as having traditionally feminine traits is unrelated to self-esteem, while perceiving oneself as having traditionally masculine traits (e.g., independence, assertiveness, perseverance), is associated with high self-esteem in women.

In this light, Sitnick and Katz (1984), have suggested that women who are vulnerable to developing eating disorders are those who perceive themselves to be lacking or failing to develop adequate "masculine" traits for social or occupational survival. Clinically, Barnett (1986), and Timko et al. (1987) have noted that bulimia or anorexia may develop as a result of sex role strain and/or multiple role conflict in women in modern society. These women may be striving to live up to a stereotypic feminine ideal while

also trying to meet the demands of a competitive career which may require a high degree of masculine traits for success.

Supporting the contention of Sitnick and Katz (1984), Lewis and Johnson (1985) further postulated from their research that individuals scoring low on both the masculine and feminine scales of the BSRI (i.e., "undifferentiated") are probably most at risk for developing eating disorders. Individuals scoring high on both scales (i.e., "androgynous") are perhaps most protected or resistant to the development of eating disorders.

The fourth hypothesis of this proposal concerns gender identity conflict (homosexuality vs. heterosexuality). Interestingly, this has only been cited as a potential causal factor in male eating disorders (Crisp & Burns, 1983; Oyeboode et al., 1988; Scott, 1987, 1987), perhaps highlighting the only area of eating disorder research where males are over-represented. Again, this situation is at least partially explained by the large discrepancies in the frequencies of homosexuality reported in male and female eating disorders. For instance, Beumont et al. (1981)

reported that 6% (2) of the 36 female anorexic sample had some homosexual experience. One other had been approached, but declined. Herzog, Norman, Gordon, and Pepose (1984) reported that 4% of 142 female eating disorders (both anorexics and bulimics) were homosexual. In contrast, reports of homosexuality in male eating disorders range between 25% and 50% (Crisp, 1980; Crisp & Burns, 1983; Crisp & Toms, 1972; Hason & Tibbetts, 1977; Herzog et al., 1984; Mitchell & Goff, 1984; Schneider & Agras, 1987; Scott, 1986; Weiner, 1976), whereas homosexuality in the general population is estimated to be approximately 10% (Francoeur, 1982; Knox, 1984). In addition, compared to controls, the fathers of male eating disorders are reported to be more outspoken about their fears of their sons potentially being homosexual, regardless of actuality (Sterling & Segal, 1985).

Generally, in the studies of male eating disorders that have included consideration of sexual conflict, there appeared to be no assessments of same-sex fantasies, degree of homosexual or bisexual preference and behavior (e.g., using the Kinsey Scale, see Knox, 1984), or the level of

perceived anxiety or conflict resulting from one's orientation. It seems to be assumed that any indication of homosexuality is anxiety provoking for the individual and puts him at risk for eating disorders.

Crisp (1980) has suggested that homosexual conflict in males with eating disorders may play a comparable role to the heterosexual conflict experienced by females with eating disorders. However, Scott (1986, 1987) contends that rather than homosexual conflict, a more general avoidance of sexuality all together better explains eating disorders in males as it does for females. In contrast, both Herzog et al. (1984), and Schneider and Agras (1987) have postulated that the cultural pressures to be thin and attractive which are experienced in the male homosexual lifestyle, puts them at greater risk for developing eating disorders, as it does for females in general.

As for the fifth hypothesis concerning sexual assault, many clinical studies have reported on the high incidence of rape or incest in the personal histories of female eating disorder patients (Damlouji & Ferguson, 1985; Dickstein, 1985; Goldfarb, 1987; Howells, Palmer, &

Chaloner, 1983; Kearney-Cooke, in press; Root & Fallon, in press; Schechter, Schwartz, & Greenfield, 1987). One study (Finn, Hartman, Leon, & Lawson, 1986), however, using female patient populations, was unable to find any significant difference in the proportion of eating disorders (as opposed to other symptoms), between women with and without histories of some form of sexual abuse.

There are several objections to the methodology and reasoning of this study which possibly render the findings questionable. First, the sample groups were all women currently in therapy for some reason, some specifically trying to deal with a recent or previous sexual assault. Thus, there is no true comparison to a non-clinical control group, only the illusion of such. Second, since the development of an eating disorder is expected to take some time, in most cases it would be unrealistic to try to assess it as a possible immediate reaction to sexual trauma. Thus, recent victims of sexual assault do not constitute a reliable comparison sample. Additionally, since what has been postulated is that an eating disorder is but one possible outcome, and sexual assault is just one possible

causal factor, then it is more accurate to hypothesize that eating disorders will have a higher incidence of sexual assault than general populations or normal controls, not other patients. Thus, it would seem to be more reasonable to separate sample groups into an eating disorder group, a non-eating disordered clinical group, and a non-clinical control group for testing the hypothesis. This latter approach would be ideal for testing the differences between clinical groups on any variable, but was not a part of this study. The question of whether sexual abuse is a causal factor for eating disorders is still open to debate.

In summary, psychosexual studies of eating disorder patients are rare. In the studies that were conducted, there seems to be inconsistent and often contradictory empirical evidence regarding each of the five psychosexual hypotheses described in this proposal. In an extensive review, Scott (1987) has emphasized the lack of any conclusive evidence in support or against the proposition that psychosexual factors are causal, or even consistently correlated with development of eating disorders. Still, psychosexual theories have survived and clinical impressions

have persisted despite the lack of empirical confirmation or disconfirmation. Since the issues involved remain unresolved, more research and testing are needed. The intention of the present study was to address this need.

CHAPTER III

METHODOLOGY

Sample

The clinical sample meeting the DSM-III-R criteria for anorexia and bulimia were obtained from patients involved, or formerly involved in the Eating Disorders Program at St. Albans Psychiatric hospital in Radford, Virginia. The sample size attained for this study was 41: 16 anorexics and 25 bulimics. All were female. Participation in this study was strictly voluntary. Finally, in accordance with the recommendations of The St. Albans Research Committee, no one under the age of 18 was asked to participate. This restriction was intended to help ensure the quality of informed consent as well as to protect the rights and confidentiality of patients.

For the purposes of this research study, which was designed to be exploratory in nature and intent, normative data available from the measuring instruments were used for comparisons. No true control group was included. It is for this reason that all results of this study are suggestive rather than conclusive.

Variables

The independent variable was the diagnosis of an eating disorder, anorexia or bulimia, as determined by the DSM-III-R criteria.

The major dependent variables investigated were:

1. Sexual knowledge and attitudes.
2. Sexual experience, functioning and satisfaction.
3. Perceived sex role.
4. Sexual orientation and preference.
5. History of sexual abuse.

Procedure

All subjects were asked to complete a questionnaire package consisting of three instruments. The first instrument was the Derogatis Sexual Functioning Inventory (DSFI) which measured dependent variables one (sexual knowledge and attitudes), and two (sexual experience, functioning and satisfaction). The second instrument was the Bem Sex Role Inventory (BSRI) which measured dependent variable three, perceived sex role. The third instrument was the Klein Sexual Orientation Grid (KSOG), (Klein, Sepekoff, & Wolf, 1985). The KSOG is based on the work of

Kinsey, Pomeroy, and Martin (1948), and provides a seven point scaled measure of the degree and direction of sexual preference (homosexuality vs. heterosexuality). The objective of the KSOG was to provide a measure for dependent variable four (above).

In addition, some standard questions regarding sexual history were added to the questionnaire package to assess previous sexual abuse (dependent variable five, above), early sex education, and sexual attitudes in the family of origin. The reader is referred to Table 1 at the end of the chapter (pp. 49-50) for a review and summary of the hypotheses, variables, and the instruments correspondingly used to measure them.

All subjects indicating the presence of an eating disorder were given a questionnaire package. Although all participants were asked to sign a consent form, the confidentiality and privacy of the patients were assured. If a therapeutically significant issue emerged from the questionnaire, subjects were asked to share this information with their therapist, or were asked permission for the researcher to share the information with the therapist.

Measures

The Derogatis Sexual Function Inventory (DSFI).

The DSFI (Derogatis & Melisaratos, 1979), contains 245 separate items which employ a variety of different formats and constructions. It requires about 30 minutes to complete. The instrument is designed to assess levels of current sexual functioning along 10 different dimensions:

- | | |
|---------------------------|------------------|
| 1. Information | 6. Affect |
| 2. Experience | 7. Gender Role |
| 3. Drive | 8. Fantasy |
| 4. Attitudes | 9. Body Image |
| 5. Psychological Symptoms | 10. Satisfaction |

There is a corresponding subtest for each scale, plus a 9-point Global Sexual Satisfaction Index which provides a measure of self-rated sexual functioning. Scores from each scale are first standardized and then summed to provide a single summary score (the DSFI Score) which represents the individual's overall level of sexual functioning.

Reliability and validity have been established as within acceptable ranges (Derogatis & Melisaratos, 1979),

via test-retest (.42-.96), internal consistency (.56-.97), predictive, factor analytic and discriminant analyses. Accurate differential classification rate of functional and dysfunctional individuals was 77% for males and 75% for females.

Because of the redundancy and overlap of information provided by DSFI scales 5, 6, and 7, with scales from the other instruments being used, these DSFI scales were eliminated from the questionnaire package. This was possible because of the established independence of the Derogatis scales.

Normative data for the DSFI is continually being updated. The latest data, reported in 1979 (Derogatis & Melisaratos, 1979), were based on 380 subjects: 167 males (76 normals, 91 dysfunctional) and 213 females (154 normals, 59 dysfunctional). Over half the sample were married. The mean age for men was 36.31 years, and the mean age for women was 31.93 years.

The Bem Sex Role Inventory (BSRI).

The BSRI (Bem, 1974, 1981) is intended to assess an individual's gender role definition by profiling scores on

two independent dimensions of masculinity and femininity. These scores reveal the degree of self description and endorsement of traditional masculine and feminine personality characteristics. It does not measure actual behaviors. A social desirability scale is provided as well as a method of scoring the degree of androgeny. The androgeny score reflects a relative balance of femininity and masculinity in a person's self description.

The BSRI originally consisted of 60 descriptive personality characteristics rated on 7-point Likert scales. Test-retest reliability ranged from $\underline{r} = .76$ to $\underline{r} = .94$. The Coefficient Alpha for internal consistency ranged from .75 to .87 (Bem, 1981).

Evolving criticism of the instrument (see Lewis & Johnson, 1985, and Uleman & Weston, 1986, for reviews), lead to the development of a shortened version (30 items) which eliminated all items that were considered problematic or redundant. High levels of reliability and validity were retained (Bem, 1974, 1981; Yanico, 1985).

Recently, a new scoring method has been suggested (Lewis & Johnson, 1985). Instead of a relative balance of

scale scores (regardless of absolute level) indicating androgyny, this classification would represent high scores (above normalized median) on both masculinity and femininity scales. In addition, a new classification of "undifferentiated" would indicate low scores (below median) on both scales.

The normative data for the BSRI are based on a 1978 sample of 816 Stanford University undergraduate students (476 males and 340 females). Scores were weighted to equalize the sex distribution (Bem, 1981).

The Klein Sexual Orientation Grid.

The KSOG (Klein et. al., 1985) is a 21 item instrument based on the work of Kinsey, Pomeroy, and Martin (1948). Also known as The Sexual Screening Questionnaire (SSQ, Wayson, 1985), it provides a seven point sexual preference scale (derived from the original Kinsey Scale), and is composed of seven variables that are dimensions of sexual orientation. Each dimension is self-rated by the subject on a seven point Likert-type scale (from 1 = exclusively heterosexual to 7 = exclusively homosexual), as applying to the present, past, and ideal. Thus,

consideration is given to the multi-variable and dynamic aspects of sexual orientation which emphasizes several degrees of bisexuality rather than a simple bipolar or tripolar categorization process. The dimensions (variables) measured are as follows:

1. Sexual Attraction.
2. Sexual Behavior.
3. Sexual Fantasies.
4. Emotional Preference.
5. Social Preference.
6. Self-Identification.
7. Heterosexual/Homosexual Lifestyle.

Scores from each dimension are summed for a total score and then averaged for a mean score. This mean score is then compared to the Kinsey Scale for interpretation. Research conducted by the authors of the KSOG (Klein et. al., 1985) and by Wayson (1985) has shown the instrument to be highly reliable (test-retest reliability, $\underline{r} = .944$) and valid (controlling using the Marlowe-Crowne Social Desirability Test, and correlation with self-description, $\underline{r} = .89$).

The KSOG was originally developed to study homosexuality and bisexuality in men. Thus, this instrument does not yet have normative data available for women. Consequently, statistical significance could not be tested for KSOG scores.

Analysis

Three primary forms of statistical analysis were employed for this study. The first analysis involved one sample, one tailed t-tests which tested the means of each dependent variable for significance in comparison to the means of normative data available from the instruments being used, or in comparison to norms available from previous research (see Table 1).

The second analysis involved the ANOVA (Analysis of Variance) procedure using the SPSS-X statistical program. The objective of this analysis was to test for significant differences in the means of dependent variables between the two subgroups in the sample: anorexics and bulimics.

The third analysis involved the calculation of Pearson Correlation Coefficients between selected variables, again using the SPSS-X program. The objective of this

analysis was to provide any possible additional information that would either lend added support, or help disconfirm the hypothesis being tested. Furthermore, these correlations were intended to help provide information on any possible relationships between the dependent variables.

TABLE 1

Hypotheses, Variables and Instruments

Independent Variables: The independent variable in this study will be the presence or absence of an eating disorder (anorexia nervosa or bulimia nervosa) as determined by the DSM-III-R (APA, 1987) diagnosis.

Hypothesis 1.

Eating disorder patients will experience significantly more negative attitudes and feelings about their sexuality and any possible sexual activity than statistical norms. Also, it was expected that eating disorder patients would have had less than typical amounts of sexual information available to them. To test this hypothesis, data gathered from the Derogatis Sexual Functioning Inventory (DSFI) were compared to available DSFI normative data.

Dependent Variables:

Sexual Knowledge
Sexual Attitudes
Self Perception
Family Influence

Instruments:

DSFI (II)
DSFI (V)
DSFI (VII)
DSFI (I)

Hypothesis 2.

If sexually active, eating disorder patients will experience significantly more sexual dissatisfaction and sexual dysfunctions (e.g., anorgasmia) than would statistically be expected as indicated by the DSFI normative data. In addition, eating disorder patients will experience more difficulty starting and maintaining intimate relationships than would typically be expected. To test this hypothesis, data from the DSFI were compared to available DSFI normative data.

Dependent Variables:

Sexual Behavior
Sexual Functioning
Sexual Fantasies
Relationship Difficulty
Sexual Satisfaction

Instruments:

DSFI (III & IV)
DSFI (IV)
DSFI (VIa)
DSFI (VIb)
DSFI (VIII & IX)

TABLE 1 (Continued)

Hypothesis 3.

Eating disorder patients will report their perceived sex or gender roles (i.e., feminine vs. masculine traits) as being significantly different than the norm. Due to the lack of agreement in the current literature, no prediction was made as to whether patients with eating disorders would experience more or less rejection, conflict, dissatisfaction and/or adherence to their perceived sex roles. To test this hypothesis, data from the Bem Sex Role Inventory (BSRI) were compared to available BSRI normative data.

Dependent Variables:

Perceived Sex Role
Sex Role Ideal

Instruments:

BSRI
BSRI

Hypothesis 4.

Patients with eating disorders will experience significant conflict about their gender identity and sexual preference (as it pertains to degrees of homosexuality, bisexuality or heterosexuality) than general populations. To test this hypothesis, data from the Klein Sexual Orientation Grid (KSOG) were analyzed.

Dependent Variables:

Sexual Orientation
Social/Emotional Preference

Instruments:

KSOG
KSOG

Hypothesis 5.

Eating disorder patients will have experienced significantly more sexual assault (incest and rape) in their pasts than would be expected in general populations as determined by available normative data. Other negative sexual experiences were also expected to be higher in proportion, e.g., unwanted pregnancies or abortions. To test this hypothesis, data were gathered and analyzed using special sections of sexual history questions that were developed and added to the Derogatis Sexual Functioning Inventory (DSFI).

Dependent Variables:

Sexual Abuse
Pregnancy or abortion

Instruments:

DSFI (X)
DSFI (IV)

CHAPTER IV

RESULTS AND DISCUSSION

Description of the Sample

A total of 41 eating disordered patients were recruited for participation in this study. All participants were either currently involved in the Eating Disorders Program at St. Alban's Psychiatric Hospital, or were formerly involved in the program and were being seen on an outpatient basis.

Of the 41 patients in the total sample, 16 (39%) were diagnosed as having anorexia nervosa, and 25 (61%) were diagnosed as having bulimia nervosa using the DSM-III-R criteria. All 41 participants were female. This was due to the fact that only two males were involved with the eating disorders program during the period of data collection, and both declined to participate. All participants in the study were Caucasian. Normative data were utilized in this study for comparative purposes, since it was designed to be exploratory in nature and purpose. Thus, no causal statements can be made regarding the data that is reported in this chapter.

Age and Onset of Eating Disorders

The mean age for the total sample was 27.4 years, ranging from 18 to 44 years. The research design required that participants be a minimum of 18 years old. The mean age of eating disorder onset was 18.3 years, ranging from 5 years to 36 years old. It is likely, however, that this self-report measure often described the beginning of fasting, over-eating and/or dieting behavior rather than the onset of a clinical eating disorder. The mean number of months spent in therapy prior to participation in this study was 21.1 months ranging from 1 to 78 months (Table 2).

Current Relationship/Sexual Status

The single highest category of participants was not currently involved in any intimate or sexual relationship ($n=19$, 46.3%). One was engaged (2.4%) and 12 (29.3%) were married. The remainder ($n=9$, 27.9%) were dating with varying degrees of commitment in the relationship.

The mean age for first sexual activity (defined as age of first consenting sexual intercourse), was 18.9 years. This excludes the 12 participants (29.3%) who had never engaged in sexual activity (Table 2).

Table 2
Descriptive Statistics of the Sample

Total Sample (N = 41)		
Variable	<u>M</u>	<u>SD</u>
1. Age	27.44	6.62
Anorexics (<u>n</u> = 16)	29.75	6.58
Bulimics (<u>n</u> = 25)	25.96	6.33
2. Age of Eating Disorder Onset	18.27	6.54
Anorexics (<u>n</u> = 16)	21.31	8.13
Bulimics (<u>n</u> = 25)	16.32	4.44
3. Months of Previous Therapy:	21.10	21.30
Anorexics (<u>n</u> = 16)	24.50	26.92
Bulimics (<u>n</u> = 25)	18.88	17.04
4. Age of First Sexual Activity, (<u>n</u> = 29)	18.90	3.08
Anorexics (<u>n</u> = 16)	18.75	2.34
Bulimics (<u>n</u> = 25)	19.00	3.57
5. Current Relationship Status (N = 41)	<u>Frequency</u>	<u>%</u>
A. No Current Relationship	19	46.3
B. Dating, uncommitted	3	7.3
C. Dating, committed	6	14.6
D. Engaged	1	2.4
E. Married	12	29.3
6. Never Engaging in Sexual Activity (N = 41)	12	29.3
Anorexics (<u>n</u> = 16)	4	25.0
Bulimics (<u>n</u> = 25)	8	32.0

Variables

The independent variable was defined by the DSM-III-R diagnosis of either anorexia nervosa or bulimia nervosa. The dependent variables were categorized into blocks defined by the hypotheses that were being tested (Table 1, Chapter 3, pp. 49 & 50). It is through this format that the statistical results are reported and described.

Analysis

The primary analysis emphasized for this study was the one sample, one tailed t-test for directional hypotheses using SPSS-X. Mean standardized scores were compared to standardized normative scores ($\bar{T} = 50$, $\underline{SD} = 10$) when available. All means and standard deviations for the total sample and subsamples are reported in this chapter. The two subsamples were anorexics, $\underline{n} = 16$, and bulimics, $\underline{n} = 25$. The ANOVA procedure using SPSS-X indicated that there were no significant differences in any of the means between anorexics and bulimics on any variable. ANOVA results are reported in Table 9. Finally, Pearson Correlation Coefficients were calculated on the independent variables

and will be reported when significant and relevant to the hypothesis under discussion.

Hypothesis 1. Eating disorder patients will experience significantly more negative attitudes and feelings about their sexuality and any possible sexual activity than statistical norms. Also, it is expected that eating disorder patients will have had less than typical amounts of sexual information available to them. To test this hypothesis, data gathered from the Derogatis Sexual Functioning Inventory (DSFI) were analyzed in comparison to available DSFI normative data.

As indicated in Table 3, two variables testing hypothesis 1 emerged as significant in the total sample. First, sexual attitudes ($M = 35.09$, $p < .001$) were found to be significantly more negative than would be expected by DSFI normative data. The DSFI attitude scale measures how respondents generally feel about various sexual behaviors, activities and decisions. This measure also includes questions about such issues as pornography, homosexuality, abortion, and sexual morality. The difference in the means,

Table 3
Mean Standardized Scores On Variables Testing Hypothesis 1 and
T-Tests Results

	<u>M</u>	<u>SD</u>	<u>t-Test</u>	<u>p</u>
Total Sample (<u>N</u> = 41)				
1. Sexual Knowledge	48.08	9.80	1.261	-
2. Sexual Attitude	35.39	10.83	8.634	<.001
3. Self-Perception (of self as sexual)	22.22	8.13	21.882	<.001
4. Family of Origin Sexual Attitude	2.05*	.67	-	-
Anorexic Sample (<u>n</u> = 16)				
1. Sexual Knowledge	44.44	10.22	2.176	<.05
2. Sexual Attitude	33.31	10.16	6.572	<.01
3. Self-Perception (of self as sexual)	21.31	10.28	14.408	<.001
4. Family of Origin Sexual Attitude	1.88*	.34	-	-
Bulimic Sample (<u>n</u> = 25)				
1. Sexual Knowledge	50.40	8.96	.225	-
2. Sexual Attitude	36.72	11.23	5.910	<.01
3. Self-Perception (of self as sexual)	22.80	8.34	16.315	<.001
4. Family of Origin Sexual Attitude	2.16*	.80	-	-

* Raw score, norms not available.

and the direction of the difference were predicted by the hypothesis.

The second variable emerging as significant was Self Perception. This scale measures the degree to which respondents view themselves, particularly their bodies, as sexual and desirable. Specifically, respondents are asked to indicate the degree to which they agree with such statements as: "Men would find my body attractive." Again, the mean standardized score ($\bar{M} = 22.22$) was significantly less than the norm ($p < .001$), thus indicating significantly more negative feelings about themselves and their bodies as being sexual. This difference and direction was also predicted by the hypothesis.

Though norms were not available for the Family of Origin Sexual Attitude score, and statistical significance could not be tested, the results are noteworthy. On a Likert-type scale of 1 to 5 (1 = extremely negative, 5 = extremely positive), respondents were asked three questions about the sexual attitudes of their families when they were growing up. The mean response was 2.05 in the total sample ($n = 41$). Eighty-five percent reported either negative or

extremely negative attitudes in the family of origin (10% reported neutral attitudes, 5% reported positive, and 0% reported extremely positive attitudes). In addition, 71% reported feeling that they could not go to their parents if they had a sexual question or problem.

Overall, the results obtained for this hypothesis are consistent with the findings of other researchers (e.g., Beumont et al., 1981). However, it is surprising that the Sexual Knowledge scores did not emerge as statistically different from the norm in the total sample. With a mean score of 48.08, this result is contrary to the prediction of the hypothesis. Thus, it appears that despite negative sexual attitudes and feelings in themselves and in their families of origin, sexual knowledge was still a concern for the majority of respondents and was apparently sought out in one way or another. Other reported sources of sexual knowledge were: peers, textbooks, school, and the media.

It should be noted that the sexual knowledge score did emerge as significantly less than the norm in the anorexic subsample ($M = 44.44$, $p < .05$). This could indicate some difference in the stress levels and avoidance

of sexuality issues in anorexics as opposed to bulimics. However, the one-way ANOVA procedure found no statistically significant difference in the means of sexual knowledge scores between anorexics ($M = 44.44$) and bulimics ($M = 50.40$, $F = 1.54$, $p = .1706$) (Table 9).

Hypothesis 2. Sexually active eating disorder patients will experience significantly more sexual dissatisfaction and sexual dysfunctions (e.g., anorgasmia) than would statistically be expected as determined by the DSFI normative data. In addition, eating disorder patients will experience more difficulty starting and maintaining intimate relationships than typically expected. To test this hypothesis, data from the DSFI were analyzed.

Referring to Table 4, all four continuous variables with norms available to test the hypothesis showed significant results at the .01 alpha level. First, the mean score for Sexual Experience ($M = 42.66$) which measures the sexual behaviors and activities in which the respondent had engaged in the past, was significantly less than the norm ($p < .01$). Second, the mean score for Sexual Drive and Desire

Table 4
Mean Standardized Scores On Variables Testing Hypothesis 2 and
T-Tests Results

	<u>M</u>	<u>SD</u>	<u>t</u> -Test	<u>p</u>
Total Sample (N = 41)				
1. Sexual Experience	42.66	11.38	4.128	<.01
2. Sex Drive/Desire	42.37	9.49	5.146	<.01
3. Sexual Fantasies	42.63	12.18	3.872	<.01
4. Sexual Satisfaction	37.95	11.46	6.733	<.01
5. Number of Lifetime Partners	4.24*	2.56	-	-
6. Relationship Difficulty	4.32*	.72	-	-
Anorexic Sample (n= 16)				
1. Sexual Experience	41.56	9.98	3.380	<.01
2. Sex Drive/Desire	40.19	8.63	4.548	<.01
3. Sexual Fantasies	39.19	10.28	4.204	<.01
4. Sexual Satisfaction	40.88	11.21	3.256	<.01
5. Number of Lifetime Partners	2.56*	1.91	-	-
6. Relationship Difficulty	4.31*	.87	-	-
Bulimic Sample (n= 25)				
1. Sexual Experience	43.36	12.34	2.690	<.01
2. Sex Drive/Desire	43.76	9.93	3.145	<.01
3. Sexual Fantasies	44.84	12.96	1.990	<.05
4. Sexual Satisfaction	36.08	11.44	6.085	<.01
5. Number of Lifetime Partners	5.32*	2.78	-	-
6. Relationship Difficulty	4.32*	.63	-	-

* Raw score, norms not available

(\bar{M} = 42.37), measures the frequency and degree to which a respondent would like to engage in a variety of sexual behaviors and activities. This measure was also significantly less than the norm. Third, the Sexual Fantasies Score measured the endorsement of various typical and atypical sexual fantasies on the part of the respondent. The mean score (\bar{M} = 42.63) was again significantly less than the norm. Fourth, the Sexual Satisfaction Score combined both a self-rating of global sexual satisfaction as well as a series of questions pertaining to specific areas of enjoyment (e.g., "foreplay") and functioning (e.g., "orgasm"). The mean score (\bar{M} = 37.95) was significantly less than the norm. These statistical differences in the means, as well as their direction, were predicted by the hypothesis. Again, the results for this hypothesis were consistent with those of other researchers (Beaumont et al., 1981; Cantwell et al., 1977; Morgan & Russell, 1975).

The two remaining variables in this block are noteworthy though norms were not available and statistical significance could not be tested. First, the mean number of sexual partners in one's lifetime was 4.24, ranging from

zero to 25. If respondents never engaging in sexual activity are excluded, then the mean is 6.00. No significant difference was found between anorexics and bulimics (see tables 4 and 9). The mean number of years of sexual activity was 7.3 years for the total sample and 10.3 years excluding those never engaging in sexual activity.

The last variable in this block (Relationship Difficulty) was a self-report measure of the respondents' experienced difficulty in starting and maintaining sexual relationships. Two questions were asked, using a Likert-type scale of 1 (extremely easy) to 5 (extremely difficult). The mean score for the total sample was 4.32 with 85.5% indicating either 4 (difficult) or 5 (extremely difficult) and the remaining 15.5% giving a neutral response.

Finally, contrary to the results anticipated by this hypothesis, the data from this sample showed no significant association ($r = .259$, $p = .087$) between the age of first sexual activity and the age of onset of the eating disorder, as was found by researchers such as Beumont et al., (1981). In addition, no evidence was found to support the DSM-III-R

(APA, 1987) distinction that significant differences exist in the sexual activity and experience of anorexics and bulimics, though other authors have found such differences (Abraham & Beaumont, 1982; Garfinkel & Garner, 1982; Haines & Katz, 1988).

Hypothesis 3. Eating disorder patients will experience their perceived sex or gender roles (i.e., feminine vs. masculine) as significantly different from the norm. It was not known whether patients with eating disorders would experience more or less rejection, conflict, dissatisfaction and/or adherence to their perceived sex roles. To test this hypothesis, data from the Bem Sex Role Inventory (BSRI) were analyzed in comparison to available BSRI normative data.

As reported in Table 5, all variables measuring sex role via the BSRI were significantly different for the total sample than the norms, except for the feminine sex role scale. The feminine sex role scale, as with the masculine scale in the BSRI, asked the respondent for endorsements of either typical feminine or masculine traits on a 7 point Likert-type scale (1 = "never true of self", to 7 = "always

Table 5
Mean Standardized Scores On Variables Testing Hypothesis 3 and
T-Tests Results

	<u>M</u>	<u>SD</u>	<u>t</u> -Test	<u>p</u>
Total Sample (N = 41)				
1. Feminine Sex Role	52.56	10.62	1.542	-
2. Feminine Ideal	59.05	7.07	8.198	<.01
3. Masculine Sex Role	35.42	13.54	6.893	<.01
4. Masculine Ideal	54.90	6.46	4.85	<.01
Anorexic Sample (<u>n</u> = 16)				
1. Feminine Sex Role	51.94	7.73	1.002	-
2. Feminine Ideal	57.40	8.18	3.502	<.01
3. Masculine Sex Role	29.56	10.80	7.570	<.01
4. Masculine Ideal	51.33	6.21	.832	-
Bulimic Sample (<u>n</u> = 25)				
1. Feminine Sex Role	52.96	12.25	1.210	-
2. Feminine Ideal	60.08	6.23	8.085	<.01
3. Masculine Sex Role	39.16	13.98	3.880	<.01
4. Masculine Ideal	57.13	5.67	6.285	<.01

true of self"). Respondents were then asked to rate themselves on the same scales as they would ideally like to perceive themselves. This served as a measure of how important they considered these respective traits to be. The mean standardized score for the "Feminine Ideal" ($M = 59.05$) indicated a significant difference from the norm despite the fact that the present perception of the respondents' feminine sex role did not ($M = 52.56$).

Both present perception of Masculine Sex Role and Masculine Ideal were significantly different than the norm. Masculine Sex Role was significantly less than the norm ($M = 35.42$, $p < .01$) and the Masculine Ideal was significantly greater ($M = 54.90$, $p < .01$). Although both Ideal scores were greater than their respective sex role scores, the difference between the Masculine Ideal and Sex Role scores was significantly greater than the difference between the Feminine Ideal and Sex Role scores ($t = 3.63$, $p < .01$).

Lastly, it is noteworthy to add that the Masculine Ideal score did not achieve significance from the norm in the anorexic subsample. Again, however, the ANOVA procedure showed no significant difference between the bulimic and

anorexic subsample means on the Masculine Ideal scale ($\bar{F} = 1.208, p = .3366$) or any other scale.

The hypothesis being investigated concerning sex role did not predict the differences or direction of differences in the means of the eating disorder sample. It appears, however, that the data provide little support for the "hyperfemininity" hypothesis described in Chapter 2 (Boskind-Lodahl, 1976), since the Feminine Sex Role scores failed to achieve significant difference from the norm. As described in Chapter 1, it is suggested that the significantly high endorsement of the "Feminine Ideal" may reflect the respondents' subscription to what they perceive to be socially desirable traits which serve their need to please others. This would be consistent with the conclusions of researchers like Rost et al., (1982) which stated that there were significant differences in the feminine traits eating disorder patients perceived themselves to possess and those they endorsed as desirable. Again, however, there was no social desirability scale within the instrument to measure this possibility.

What does emerge as clear is that the eating

disorder patients perceive themselves to be seriously lacking in what is considered to be typically masculine traits (e.g., assertiveness) by the BSRI, and that they strongly desire a change in this discrepancy. These results are very much in line with the findings of Sitnick & Katz (1984), as well as Timko et al., (1987).

Interestingly, the Masculine Sex Role score was also significantly and positively associated with the following variables:

	<u>r</u>	<u>p</u>
1. Sexual Knowledge	.606	<.001
2. Sexual Experience	.355	.011
3. Sexual Attitudes	.551	<.001
4. Self Perceptions	.474	.001
5. Sexual Fantasies	.361	.010

Masculine Sex Role scores were significantly but inversely correlated with Relationship Difficulty (r = -.331, p = .017). Also, Masculine Ideal scores were inversely correlated with sexual satisfaction scores (r = -.417, p = .004).

Overall, these Masculine Sex Role correlations are not completely surprising or unexpected. As postulated by the BSRI, typically expected traits associated with a masculine sex role include: assertiveness, independence, risk taking, leadership, and self-assuredness. Thus, it may be reasonable to hypothesize that someone (man or woman) with these traits may have a greater degree of sexual experience, and more sexual knowledge. The data would also seem to suggest that masculine traits are associated with more liberal sexual attitudes, positive sexual self-perceptions and fantasies, as well as less difficulty in relationships.

The possible interpretation of the association of Masculine Ideal scores with low sexual satisfaction is more elusive. However, it seems possible that the idealization of these masculine traits could result in lesser degrees of sexual satisfaction because of possibly unrealistic expectations, sexual spectating, and/or a sense of over-responsibility for the sexual interaction itself (see Knox, 1984). But as always, interpretation is made with caution.

Feminine sex role scores were positively and significantly correlated with the following:

	<u>r</u>	<u>p</u>
1. Sexual Satisfaction	.269	.045
2. Sexual Abuse/Incest	.295	.030

Also, Feminine Sex Role scores were inversely associated with Age of First Sexual Activity ($\underline{r} = -.344$, $\underline{p} = .027$). In other words, high femininity scores were correlated with early onset of sexual activity. These correlations and their possible meanings are more difficult to interpret than the more immediate possible explanations of the Masculine Sex Role Score correlations.

As before, caution is recommended when attempting to interpret possible meanings attributable to these data. It is recommended that at least three factors be kept in mind. First, as stated previously, due to the exploratory nature and design of this study, no statement regarding cause and effect can be made in association with the above correlations. Even if such a relationship does exist among these factors, "cause" and "effect" may still be confused and accurately labeling these factors as such would still be

difficult.

Second, with such small correlations ($r \leq .30$), it is important to question whether statistical significance necessarily indicates practical significance. Even when correlations are theoretically possible, such low coefficients may be spurious.

Third, in specific regard to the Feminine Sex Role correlation data, it is again important to consider the personality traits typical of eating disorder patients, as discussed in Chapter 1 (Garfinkel & Garner, 1982; Johnson & Conners, 1987; Haimes & Katz, 1988). In particular, these subjects would typically be expected to want to be "pleasing" and to please others before themselves. Unfortunately, none of the instruments provided a measure for this trait. However, this factor is important to the present data because it would be expected that these subjects would tend to overrate the positive aspects of their sex lives, namely sexual satisfaction.

If possible, it would be extremely informative to ask subjects in future research if their perspective of sexual satisfaction pertained to themselves or to their

partners. If the sexual satisfaction of partners were considered more important than their own, then the process of trying to please others may possibly underlie and explain both high self-rated sexual satisfaction and even high Feminine Sex Role scores if traits associated with these scores are what subjects were conditioned to believe were pleasing to others. This may also begin to explain the association of high femininity scores with earlier onset of sexual activity ($r = -.344$, $p = .027$).

Regarding the Sexual Satisfaction reports, however, these scores need to be additionally challenged on another level. During the process of coding the questionnaires and tabulating the data, it was noted that several of the subjects were reporting relatively high levels of sexual satisfaction despite also reporting sexual dysfunction or very low levels of quality in their sexual interactions (e.g., lack of desire, anorgasm, vaginismus, or painful intercourse). This includes subjects who reported clearly disliking any kind of sexual activity and were quite satisfied in completely avoiding sexual contact with husbands or partners or in keeping the frequency of contact

to minimum levels. Some reported avoiding relationships all together while others were reporting high levels of satisfaction though they were clearly not getting other needs met, e.g., perceiving enough touching, kissing, foreplay, or intimacy and closeness in general. The correlation between self-rated global sexual satisfaction and the scores from the sexual satisfaction scale was relatively high ($r = .518$), but significantly less than perfect, or near perfect as would be reasonable to expect when attempting to establish the validity of a scale.

Though the reasoning here is speculative, this interpretation would lend some understanding to the possible link and correlation between perceived Feminine Sex Role and perceived sexual satisfaction. In addition, one possible origin of this process is suggested in the correlations between Feminine Sex Role scores and Prior Sexual Abuse or Incest. Knowledge and evidence regarding any possible causal path is severely lacking at this point, and again, the possibility that the correlation may be spurious must be considered. However, some of the literature (Gelinas, 1983; Goldfarb, 1987; Herman, 1981; Russell, 1986) has suggested

that a history of sexual assault or incest may result in some cases in exaggerated self-perceptions and expression of femininity or stereotypic feminine traits. This could be interpreted as a conditioned response and/or an adaptive coping mechanism which evolved as an attempt to deal with the severe stress of the situation.

Hypothesis 4. Patients with eating disorders will experience significantly more conflict about their gender identity and sexual preference as it pertains to degrees of homosexuality, bisexuality or heterosexuality, than general populations. To test this hypothesis, data from the Klein Sexual Orientation Grid (KSOG) were analyzed. Normative data for this instrument was not available for women.

Although significance could not be tested, the KSOG measuring sexual preference was considered a valid test of possible gender identity conflict (Klein, et al., 1985; Wayson, 1985). Using the Kinsey 7 point scale (1 = exclusively homosexual, 7 = exclusively Heterosexual), the scores from the KSOG (Table 6) indicated that respondents in this sample clearly consider themselves to be primarily Heterosexual in their sexual preference ($\bar{M} = 6.08$). The

second set of scores reported in Table 6 are indicative of the emotional or social preference of the sample in terms of which sex they would rather spend time with. These scores seem to indicate that emotionally and socially, this sample is nearly just as likely to prefer the company of women as men ($\bar{M} = 3.98$). However, since this score is based on the hypothetical independence of KSOG scales, which has not yet been established by the developers of the instrument (Klein, et al., 1985), it is suggested that this score be interpreted with more than the usual amount of caution.

Lastly, KSOG scores were inversely, but significantly correlated with masculine sex role scores ($r = -.266$), $p = .049$). Apparently the more subjects perceived themselves to possess masculine traits according to the BSRI, the more they were likely to score closer to the bisexual part of the continuum on the KSOG. The association, however, is not strong enough to make any statement about the implication of masculine traits in this sample and their sexual preference. Additionally, none of the subjects scored in a definitive bisexual range on the KSOG (and none in the homosexual range) while only 8 (19.5%)

Table 6
Mean Scores On Variables Testing Hypothesis 4

	<u>M</u>	<u>SD</u>
<hr/>		
Total Sample (<u>N</u> = 41)		
1. Sexual Preference	6.08	3.81
2. Social/Emotional Preference	3.98	1.12
Anorexic Sample (<u>n</u> = 16)		
1. Sexual Preference	6.18	3.87
2. Social/Emotional Preference	4.01	1.34
Bulimic Sample (<u>n</u> = 25)		
1. Sexual Preference	6.01	3.70
2. Social/Emotional Preference	3.96	.99

subjects scored within a clear masculine sex role range. Overall, the results from this sample present no evidence of gender identity conflict.

Hypothesis 5. Eating disorder patients will have experienced significantly more sexual abuse (incest and rape) in their pasts than would be expected in general populations as determined by available normative data. Other negative sexual experiences are also expected to be higher in proportion, e.g., unwanted pregnancies or abortions. To test this hypothesis, data were analyzed using special sections of sexual history questions that have been developed and added to the Derogatis Sexual Functioning Inventory (DSFI).

As shown in Table 7, this sample reported a high incidence of sexual abuse or incest (58.5%) prior to the onset of the eating disorder. Sixty nine percent (11) of the anorexics and 52% of the bulimics reported histories of incest or sexual abuse. These rates are at least twice the rate expected in the general population (20-30%) (Gelinas, 1983; Goldfarb, 1987; Herman, 1981; Russell, 1986), though chronic underreporting is constantly cited as a problem.

Table 7
Statistics On Variables Testing Hypothesis 5

	Number of Respondents	%
<hr/>		
Total Sample ($N = 41$)		
1. Prior Sexual Abuse or Incest	24	58.5
2. Unwanted Pregnancy	4	9.75
3. Abortion	4	9.75
Anorexic Sample ($n = 16$)		
1. Prior Sexual Abuse or Incest	11	68.8
2. Unwanted Pregnancy	1	6.25
3. Abortion	1	6.25
Bulimic Sample ($n = 25$)		
1. Prior Sexual Abuse or Incest	13	52.0
2. Unwanted Pregnancy	3	12.0
3. Abortion	3	12.0

Despite the high rates, however, these figures for sexual abuse or incest in this sample are not significantly different than those found in other female clinical populations which have indicated rates ranging within 50-60% (Crain, Henson, Colliver, & MacLean, 1988; Finn, et al., 1986; Goldfarb, 1987; Kearney-Cooke, in press; Oppenheimer, et al., 1983; Root & Fallon, in press).

Again, based on these data, no statement can be made concerning a possible causal relationship or link between prior sexual abuse/incest and the development of eating disorders. Other researchers have postulated that an indirect rather than a direct causal link exists. For instance, authors like Oppenheimer et al. (1983), Root and Fallon (in press), and Vandereycken & Meeman (1984) have stated that the well-documented (e.g., Gelinis, 1983) potential side effects of incest or sexual abuse (such as distorted thinking and body image, dissociative effects, withdrawal and rigidity) provide the indirect links, or predisposing factors that may lead to the development of eating disorders. These authors have also noted that survivors of incest or sexual assault typically develop

maladaptive coping mechanisms which result in the clinically observed patterns of dysfunctional relationships as well as the pervasive difficulties with closeness and intimacy also typically seen in eating disorder patients (Root & Fallon, in press).

It is noteworthy to add that the subjects in this study reported sexual abuse or incest more often than any other factor as what they perceived to be among the primary causal factors contributing to the development of their eating disorders. Eighteen (43.9%) of the subjects reported perceiving their history of sexual abuse or incest as important in causing their eating disorder (Table 8). Respondents were asked to list as many factors as they thought were important, but in order of significance. Six of the 24 total subjects reporting similar histories did not report any perceived connection between the events. Finally, it is important to add that 10 of these same 24 subjects were victimized again later in life through sexual assault or rape. Two respondents who were not previously victimized by incestuous sexual abuse were later victims of rape.

As for factors concerning unwanted pregnancies and abortions, four pregnancies and four abortions were reported. The true rates of unwanted pregnancies and abortions in the general public are unknown. However, the rates found in this sample do not seem to indicate any significant association between these factors and eating disorders. Only one subject reported perceiving abortion as a possible causal factor. However, this subject also reported that the abortion in question was her third and that reporting this as a factor was in conjunction with, and secondary to the ending of a significant relationship.

Overall, having a history of prior sexual abuse or incest was not positively or significantly associated with any other variable except Feminine Sex Role scores ($r = .295$, $p = .08$), as discussed earlier. However, the following inverse and significant correlations did exist.

	<u>r</u>	<u>p</u>
1. Age of First Sexual Activity	-.33	.040
2. Sexual Satisfaction	-.29	.034

The first correlation regarding Age of First Sexual Activity indicates that the presence of prior sexual abuse

or incest is associated with an earlier onset of sexual activity (consensual intercourse) among those ever sexually active. However, it is also important to add that of the 12 respondents who had never engaged in sexual activity, seven (58.33%) had histories of sexual abuse or incest. Thus it can accurately be stated that based on this data, prior sexual abuse or incest is associated with both outcomes: either respondents tended to engage in sex earlier, or avoided sexual activity (and presumably relationships) altogether.

The second correlation indicated that having a history of sexual abuse or incest is associated with low levels of sexual satisfaction. Again, it is important to be reminded of the potential problems with the self-report measure of sexual satisfaction mentioned earlier. Overall, however, despite the relatively small correlation coefficient, the association is not unexpected and is consistent with the hypothesis and the reports of other researchers (e.g., Gelinas, 1983).

Table 8
Self-Reported Causal Factors For Eating Disorders

Factor	Number of Respondents	%
1. Prior Sexual Assault or Incest	18	43.9
2. Need for Control or Perfectionism	17	41.5
3. History of Obesity in Childhood	15	36.6
4. Coping With Stress or Depression	14	34.1
5. Trying to Please One or Both Parents	10	24.4
6. Parents' Marital Conflict/ Dysfunctional Family of Origin	10	24.4
7. Sexuality Concerns	7	17.1
8. Recent Marital or Relational Conflict	7	17.1
9. Dance or Sports Training	6	14.6
10. Grief Reaction to Death or Divorce	5	12.2
11. Cultural Influence or Social Pressure	5	12.2
12. Adolescent Adjustment Difficulties/ Leaving Home Issues	5	12.2
13. Comparison to Another Family Member	4	9.8
14. Suicidal Ideation	4	9.8
15. Miscellaneous External Stress	4	9.8

Table 9
ANOVA F Values Testing Group Means of Anorexics and Bulimics on
Independent Variables

Variable	F Value	p
1. Sexual Knowledge	1.540	.171
2. Sexual Attitudes	2.145	.055
3. Self-Perception	2.071	.058
4. Family of Origin		
Sexual Attitudes	1.699	.184
5. Age of First Sexual Activity	.421	.918
6. Sexual Experience	1.559	.159
7. Sexual Drive/Desire	.597	.868
8. Sexual Fantasies	1.596	.148
9. Sexual Satisfaction	.879	.554
10. Number of Lifetime Partners	.961	.499
11. Relationship Difficulty	2.788	.074
12. Feminine Sex Role	.705	.784
13. Feminine Ideal	.905	.585
14. Masculine Sex Role	.965	.555
15. Masculine Ideal	1.208	.337
16. Sexual Abuse/Incest	.162	.689

CHAPTER V

SUMMARY AND CONCLUSIONS

Procedure

This study represents an exploratory research project which investigated the possible relationship between psychosexual factors and the development of eating disorders such as anorexia and bulimia. Forty-one female respondents (16 anorexics and 25 bulimics), diagnosed as having an eating disorder using the DSM-III-R criteria, were recruited from the Eating Disorders Program at St. Albans Psychiatric Hospital in Radford, Virginia. Each was given a questionnaire package consisting of the BEM Sex Role Inventory (BSRI), the Derogatis Sexual Functioning Inventory (DSFI), the Klein Sexual Orientation Grid (KSOG), and added questions developed to obtain additional information about sexual histories and sexual attitudes of the families of origin.

Participation in the study was strictly voluntary, though no one under 18 years of age was asked to participate to ensure the quality of informed consent. Assurances were made about the strict confidentiality of the information

obtained.

Data analysis took three forms. First, one sample, one-tailed t-tests were performed to test the means of the total sample on each dependent variable in comparison to the means of available normative data. Second, the ANOVA procedure was used to test the difference in the means of the dependent variables between the subgroups in the sample (anorexics and bulimics). Third, Pearson Correlation Coefficients were calculated for selected variables to provide additional information for the hypotheses being tested. Independent variables were categorized into blocks based on the hypothesis they were testing.

Definitions

In order to be included in this study, participants needed to be classified as having an anorexic or bulimic eating disorder as determined by the DSM-III-R (APA, 1987) diagnostic criteria.

Anorexia Nervosa is defined by the DSM-III-R as follows:

- A. Intense fear of fat, even when underweight.
- B. Disturbance in the way in which one's body weight, size, or shape is experienced; e.g., "feeling fat"

even when emaciated. Belief that one area or part of the body is "too fat" even when clearly underweight.

- C. Refusal to maintain body weight over a normal minimum weight for age and height; weight loss of 15% or more of expected normal body weight; failure to make expected weight gain during periods of growth.
- D. In females, absence of at least three consecutive menstrual cycles when otherwise expected to occur (primary or secondary amenorrhea).

Bulimia Nervosa is defined by the DSM-III-R as follows:

- A. Recurrent episodes of binge-eating (rapid consumption of a large amount of food in a discrete period of time).
- B. During the eating binges, there is a feeling of lack of control over the eating behavior.
- C. The individual regularly engages in either self-induced vomiting, use of laxatives, strict dieting, fasting, and/or vigorous exercise, usually following a binge-eating episode in order

to prevent weight gain.

D. A minimum average of two binge-eating episodes per week for at least three months.

E. Persistent overconcern with body shape and weight.

Hypotheses

The five specific psychosexual hypotheses that were investigated and tested in this study were as follows:

1. Eating disordered patients will have significantly less sexual knowledge and more significantly negative attitudes than available norms.

2. Eating disordered patients will have significantly less sexual experience, satisfaction, adequate functioning and more difficulty in relationships in general than available norms.

3. Eating disordered patients will experience or perceive their sex roles significantly different than available norms (the direction of the difference was not predicted).

4. Eating disordered patients will be experiencing some degree of conflict concerning their gender identity and sexual preference.

5. Eating disordered patients will have experienced significantly more sexual abuse or incest in these parts (prior to the onset of their eating disorder) than would be expected in general populations.

Significant Results

Overall, the data supported four of the five hypotheses, though two were only partially supported. Some qualification and explanation for this partial support for two and total lack of support for one of the hypotheses is warranted.

Concerning the first hypothesis, which predicted significant differences in sexual knowledge and attitudes, and scores pertaining to negative sexual attitudes and sexual self-perception attained statistical significance, whereas sexual knowledge scores did not (no significant difference was found in these mean scores compared to available norms). The bulimic subsample on the whole had higher mean scores on sexual knowledge than did the anorexic subsample, but this difference did not reach statistical significance. It is left up to debate as to whether normative levels established by the measuring instrument are

also necessarily adequate or "healthy" levels of sexual knowledge.

Though contrary to the prediction of the hypothesis, the importance of the Sexual Knowledge variable cannot be discounted, especially when over a third (36.6%) of the sample showed significantly inadequate levels of sexual knowledge (scores of 48 or below, with a standardized norm of 50). Furthermore, though the data do seem to indicate that eating disordered patients will pursue or obtain normative levels of sexual knowledge, this does not seem to be protective against severely negative sexual attitudes nor negative perceptions of themselves and their sexuality. At least part of this can be accounted for by the negative sexual attitudes apparently modeled in the families of origin for a majority of subjects in the sample. This is consistent with the basic tenets of social learning theory (see Franceour, 1982; Knox, 1984).

Regarding the second hypothesis postulating significantly less sexual experience, functioning and satisfaction, all variables attained statistical significance in the direction predicted (the variables

included mean scores for: Sexual Experience, Sexual Desire/Drive, Sexual Fantasies, and Sexual Satisfaction). Clearly, the data seem to suggest not only less sexual experience, functioning and satisfaction, but also an overall tendency to avoid sexual relationships and sexual activity, perhaps to the point of having strong aversive feelings toward their own sexuality. Also, as discussed in Chapter IV, the probability that some eating disordered patients were quite content to avoid sexual activity or to over-rate their satisfaction with dysfunctional or inadequate fulfillment in their sexual activity, cast additional suspicion on the meaning and/or validity of sexual satisfaction scores.

Another variable which may lend support to this contention of general sexual avoidance, but which could not be tested for significance due to the lack of normative data, was the Relationship Difficulty variable (total sample mean = 4.32 on a 5 point Likert scale with 5 = extreme difficulty starting and maintaining relationships). No significant difference was found between anorexics and bulimics. Also, considering the mean Number of Lifetime

Sexual Partners, again no statistically significant difference was found between bulimics and anorexics despite the observation that bulimics (mean = 5.32) overall had twice the number of partners of anorexics (mean = 2.56). In fact, statistical significance was not attained in the differences in mean scores between anorexics and bulimics on any of the psychosexual variables. This is surprising considering that the literature as well as the DSM-III-R has suggested that bulimics were more prone to sexual acting-out (APA, 1987; Haimen & Katz, 1988; Johnson & Connors, 1987; Scott, 1987). Nevertheless, lack of statistical significance and confirmation of this contention in this sample does not necessarily mean that stronger statistical evidence would not be found in other samples, nor does it invalidate apparent clinical observation.

As for the third hypothesis concerning sex roles, again all variables except one, were statistically significant in the differences of their mean scores from available norms. The directions of the differences, however, were not predicted by the hypothesis. No statistically significant difference was found for the

Feminine Sex Roles Scores (current self-perceptions of feminine traits), but the Feminine Ideal (perceived importance of feminine traits) scores were significantly greater than the norm. Further, the Masculine Sex Role scores were significantly less than the norm while the Masculine Ideal scores were significantly greater.

First, the data lend no support to either the rejection of a feminine sex role or to the hyper-vigilant adherence to a feminine sex role by either anorexics or bulimics. This is contrary to the so-called "hyperfemininity hypothesis" originally proposed by Boskind-Lodahl (1976) and maintained by more current researchers (Strien & Berger, 1988). Further, it may be possible that the significant importance of feminine traits (as opposed to the self-perceptions of currently possessed feminine traits) may still be a reflection of the eating disordered patients' need and desire to please others through traits they perceive to be desired by others. (Interestingly, feminine sex role scores were also significantly correlated with earlier age of first sexual activity.)

Second, the most outstanding result of the data analysis concerning the sex role hypothesis involves the very clear self-perception of this sample as a whole, that they were definitely lacking in stereotypic masculine traits (e.g., assertiveness, independence) and that these traits were definitely important. These results are consistent with the findings of current researchers like Timko, et al (1987), who found that the degree to which a person "idealized" stereotypic masculine traits and the more these were perceived to be lacking in the self, were much more predictive of an eating disorder than any other sex role variable or score. Moreover, Timko et al. (1987), found that women striving to fulfill multiple roles in their lives were at significantly higher risk of developing eating disorders.

Regarding the fourth hypothesis about possible gender identity conflict or conflict about sexual preference, the data showed no indications or suggestion of any conflict. All respondents (who were all female) were found to be clearly and exclusively heterosexual in preference and behavior and were experiencing no conflict.

Emotional or socially, however, some of the respondents indicated an equal preference for both sexes while some seemed to prefer the company of the same sex.

Overall, with an all female sample, these results regarding sexual preference are not surprising considering that the literature has suggested that possible gender identity conflict was only observed to be a potential problem in male eating disorder patients (Andersen & Michalide, 1983; Crisp & Burns, 1983; Lundholm & Anderson, 1986; Oyebode, Boodhoo, & Schapira, 1988).

Finally, concerning the fourth hypothesis regarding sexual abuse and incest, the incidence of such events prior to the onset of the eating disorder in this sample was 58.5% (24). This percentage is over twice the rate typically found in the general population (Herman, 1981; Goldfarb, 1987; Russell, 1986) and is consistent with the results found by other researchers (Kearney-Cooke, in press; Oppenheimer, et al., 1983; Root & Fallon, in press). However, it has been consistently pointed out that the rate of sexual abuse or incest in eating disordered patients is not significantly greater than the rate found in other

clinical populations (Craine et al., 1988; Finn et al., 1986; Goldfarb, 1987; Scott, 1987). Thus, it seems just as likely that survivors of sexual abuse or incest will develop an eating disorder as any other dysfunctional symptom.

Other negative sexual experiences, such as unwanted pregnancies or abortions did not emerge as significant. However, it is noteworthy to add that a history of sexual abuse was significantly correlated with both an earlier age of first sexual activity and higher feminine sex role scores. On the other hand, sexual abuse survivors also accounted for 7 of the 12 (59%) of the respondents who had never engaged in voluntary sexual activity.

Implications and Conclusions

It cannot be emphasized enough that due to the exploratory nature and design of this study, no definitive conclusions can be drawn regarding possible causal relationship between the psychosexual variables investigated in this study and the development of eating disorders. Nevertheless, the data resulting from this study have potentially strong implications for the theory, research,

and therapy of eating disorders.

First, regarding therapeutic concerns, it seems clear that any approach to treating eating disorders effectively should include components of sexuality education at some point, which supplies not only basic factual information, but also enables the exploration and challenge of sexuality attitudes, both general and towards oneself. Despite the observations that only a little more than a third (36.6%) of this sample showed inadequate levels of sexual knowledge, sexuality and relationship attitudes were severely and significantly negative. This also seems to be reflected in the relative lack of sexual experience, comparing the Sexual Experience scores to normative data, and in the overall extreme difficulty most of the participants reported experiencing in their relationships in general. Gender identity and sexual preference, however, did not emerge as problems for this sample.

Second, based on scores for Sexual Drive/Desire, Fantasies and the previously discussed problems with the Sexual Satisfaction Scores, sex therapy may be needed for those eating disorder patients sexually dysfunctional, e.g.,

clearly anorgasmic or lacking in sexual desire. It would be recommended that this component of treatment be initiated in the later phases of treatment since this area is expected to involve highly sensitive and possibly aversive issues, which if initiated too early, may inhibit rather than facilitate eating disorder treatment. Along these lines, it would behoove the therapist to explore and challenge an eating disorder patient's self-described satisfaction with clearly inadequate, unacceptable, or dysfunctional sexual activity. The exact number of respondents for which this was the case was unknown, but it warrants concern.

Third, given the significantly low masculine sex role scores and the lack of significance attained by the feminine sex role scores (scores were not significantly different than the norm), it would seem important to look beyond these dimensions to examine the potential meaning of femininity and masculinity to the individual eating disorder patient. For instance, rather than use these labels to indicate that patients will need to become more masculine (or "androgynous"), which inherently betrays a sexist-cultural bias, it would be more meaningful and

potentially effective to teach assertiveness skills and strategies, as well as how to be more independent and decisive. These skills would have multiple purposes in the lives of eating disorder patients (without the use of value-laden sex role labels) and would help with not only basic relationship skills, but also with major issues such as successfully leaving home and their families of origin to build their own lives.

In addition, some of the feminist teachings and approaches to therapy could be extremely valuable to some eating disorder patients. This recommendation is based on several basic premises. First, as discussed earlier, most eating disordered patients are women which is highly indicative of the differential sociocultural pressures and conditioning of men and women. In fact, the cultural emphasis on physical beauty as defined by thinness in women, has been strongly suggested by Orbach (1978a, 1978b) as being primarily dictated by a male biased value system in this society. Second, though not without its share of controversy, it can be stated that we live in a predominantly patriarchal culture which systematically

undermines the power and privilege of women in society and in relationships (Hare-Mustin, 1986). Consequently, eating disorders may result as some women struggle to deal with their felt powerlessness through exaggerated attempts at over-control in the one realm of control perceived to be available to them: their bodies, food and weight. (Barnett, 1986; Boskind-Lodahl, 1976; Orbach, 1978a, 1978b.)

Basically, according to Wheeler (1985), a feminist approach to therapy "begins with a recognition of the inferior status of women and proceeds to an analysis of the specific forms and causes of this inequality. It makes recommendations for change, and leads eventually to a recognition and validation of the unique reality of being a woman. Implicit in any feminist analysis is the assertion that women have been denied full participation in the creation of culture, and systematically deprived of the freedom to determine their own lives" (p.54). Thus, unlike other therapeutic approaches (e.g., psychodynamic, R.E.T., family therapy; see Goldner, 1985), the social context from which sex roles and expectations primarily emerge can be examined and challenged, as well the complex array of other

individual and familial factors involved in the development of eating disorders.

Hopefully this can be done in therapy without inspiring mutually blaming interactions nor arguments about the responsibility for change, though these are issues which find little agreement in the various schools of therapy. Nevertheless, a feminist approach may also help therapists to examine his or her own biases and unconscious assumptions about sex roles in therapy (Goldner, 1985; Hare-Mustin, 1986). Regarding the possible impact of sex role biases, Eisenstein (1983) states: "sex roles in fact represent, not a pure scientific description, but a set of cultural directives for what constitutes the gender expectations of the society under scrutiny" (p.11). Thus, without challenging their own belief systems, therapists may be just as guilty as families and other social institutions, of perpetuating more of the same stereotypic expectations which may have contributed to the development of dysfunctional behaviors such as eating disorders.

The suggested ideal would be to transcend concepts of sex roles all together since any such categorizations of

human behaviors, thoughts and feelings are inherently reductionistic, self-limiting and value-laden. Perhaps the objective should be to develop flexible descriptions and expectations of human experience and identity, which may or may not include concepts of "androgeny" (Bem, 1974, 1981), but which maximize the potential for optimal mental health, regardless of whether one is male or female.

As a final statement about feminist approaches to therapy, some eating disordered patients may be helped to challenge and deal with their common need to please others. Based on clinical experience to date, it is the strong feeling of this researcher that this need to be pleasing in eating disorder patients, second only to body experience and image distortion problems, as suggested by Vandereycken and Meerman (1984), is the most pervasive and significant process that underlies the pathology of eating disorders. (Also see Haines & Katz, 1988.)

Finally, in regards to the fifth hypothesis concerning sexual abuse and incest, this sample showed an incidence rate of 58.5% prior to the onset of eating disorders. As discussed in Chapter 4, this rate is over

double that expected in the general population, but not significantly different than the rates found in other female clinical populations (Craine et al., 1988; Finn et al., 1986). The implications, therefore, are complicated.

First, it is impossible to conclude from these data that sexual abuse or incest is a direct causal factor of eating disorders since it appears that the development of anorexia or bulimia is no more likely to occur than other clinical symptoms when such a history exists. Without doubt, however, sexual abuse and incest have definitely been implicated as a potentially important contributing or possibly predisposing factor, though it is also clear that other mediating variables are also at work (e.g., individual, familial and/or cultural factors). As suggested by such authors as Vandereycken and Meerman (1984), perhaps sexual abuse or incest provides an indirect rather than direct causal relationship to the development of eating disorders via the severe results such events have on the distortion of body image and experience. It is then not surprising that sexual abuse and incest were also significantly associated with low levels of sexual

satisfaction in this sample because of the resulting negative sexual self-image and the changes in the way sex is experienced (Gelinias, 1983; Russell, 1986).

However, regardless of whether sexual abuse and incest are viewed as indirect contributing factors or whether the probability of developing an eating disorder is no greater than the presentation of other clinical symptoms, the primary consideration is that these factors are extremely important issues for the majority of these patients, as indicated by both the data analysis and the self-report. Thus, the most important conclusion from this hypothesis is that dealing with issues of sexual abuse and incest should necessarily become part of the therapy process for the majority of eating disorder patients.

As for overall research implications and recommendations, one issue seemed to remain a constant factor in its omission throughout this study. Thus, it is strongly recommended that future research involving eating disorders involve some measure for social desirability since the observed "need to please" in many eating disorder patients created the need for added caution in the

interpretation of some of the data analysis.

Similarly, if sexuality and sexual behaviors are also studied in conjunction with eating disorders, then it is additionally recommended that some way be found to factor out sexual satisfaction from being satisfied with sexual dysfunction. Also, in the study of sexuality and sexual behaviors, there is a tremendous temptation to speculate on the possible meanings of the data in relation to subjects' perceptions and struggles with intimacy, closeness and relationships in general. However, based on the data in this study, no definitive statements can be made concerning these issues. No measure of intimacy was used in this study and it is a mistake to assume that sexual activity implies that there is an intimate relationship established. In fact, it has been observed clinically, that sex is often used to avoid intimacy (Francoeur, 1982; Knox, 1984). It is therefore recommended that measures of intimacy be included in future research concerning eating disorders and sexuality.

Furthermore, for additional information and potential explanation, future eating disorder research may

need to include measures for self-esteem and/or depression. The purpose of these measures would be to investigate the possible association of eating disorders with low self-esteem and/or affective disorders (e.g., see Cantwell, et al., 1977; Dunn & Onducin, 1981; Pertschuk, et al., 1986).

Finally, it is recommended that true control groups be included in future research to increase the strength and validity of conclusions drawn from the data, and that longitudinal research studies be conducted for eating disorders in order to establish clear temporal relationships between hypothesized "cause" and "effect" factors. This also eliminates the possibility of a third unknown or mediating variable explaining the covariation in factors. Also, it is highly recommended that males be included in as much future eating disorder research as possible to examine similarities and differences from female eating disorder samples.

Final Remarks

Throughout the research literature regarding eating disorders and sexuality (see Scott, 1987), it has been consistently postulated that eating disorders result, at least to some degree from the sexuality conflicts and maladjustments which may arise from the physical and hormonal changes of adolescence. Other psychosexual factors which have been implicated include: sex role conflicts, gender identity conflicts, and histories of sexual abuse or incest. All hypotheses in this study regarding these psychosexual factors attained at least some degree of statistically significant support, except gender identity conflict. Gender identity conflict, for the most part, appears to be absent in eating disordered women.

Clearly, psychosexual factors have important and significant relationships to the development and maintenance of eating disorders, though the research design of this study has prohibited any conclusions about cause and effect. Overall, sexuality seemed to be a major concern for most of the eating disordered patients in this sample, but issues related to sexuality are apparently avoided and probably

aversive to a majority of eating disordered patients. Therefore, it is considered extremely important, perhaps crucial to the effectiveness of treatment and the long-term life adjustment of eating disorder patients that these issues be included in the process of therapy. This is not to say that the inclusion of psychosexual considerations in the treatment of eating disorders will by itself alleviate eating disordered behaviors or symptoms. Instead, inclusion is recommended in conjunction to the multidimensional treatments of eating disorders already in existence.

Finally, significant differences were not found between anorexics and bulimics on any of the psychosexual factors studied. This finding was surprising and in contrast to clinical observations and the reports commonly found in the research literature concerning differences in sexuality experiences between anorexics and bulimics. It should be emphasized, however, that the participants in this study were all obtained from an inpatient hospital population and were among the most chronic and severe cases of eating disorders. Thus, with a sample that is suspected to represent an extreme end of a continuum, differences

between subsamples may tend to disappear. Further, generalizing or comparison to larger populations of anorexics or bulimics who may not be severe enough to warrant hospitalization may not be accurate or appropriate in research or therapy.

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APPENDIX

- A. Research Committee Letter
- B. Letter of Participation
- C. Bem Sex Role Inventory (BSRI)
- D. Derogatis Sexual Functioning Inventory (DSFI)
- E. Klein Sexual Orientation Grid (KSOG)
- F. Vitae

Appendix A

 Saint Albans
Psychiatric Hospital

P.O. BOX 3608 RADFORD, VIRGINIA 24143
703 639-2481

November 24, 1987

Mr. Rob Welch
Saint Albans Psychiatric Hospital
P.O. Box 3608
Radford, VA 24143

Dear Rob:

This letter is to confirm the decision of the Research Review Committee of November 19, 1987, approving your request for our research project utilizing Eating Disorder patients at Saint Albans. The minutes of the Research Committee will reflect the modifications in the study utilizing patients 18 years of age and older so that parental consent is not necessary. A reminder that permission from the attending physician as well as the patient will be necessary before a patient can be included in the study.

We feel that the project will be a useful one. From a psychiatric standpoint, it would particularly helpful if your study could in some way compare this patient population with other diagnostic categories of patients.

Good luck and if the committee can be of further assistance to you, please feel free to contact me.

Sincerely,

Ronald L. Myers, M.D.

cc: Research Review Committee Minutes

RLM/amg

MAILED
NOV 24 1987

Appendix B

VIRGINIA TECH

Dear Participant:

Your help is needed. You are being requested to participate in a research project concerning eating disorders and sexuality. Specifically, if you agree to participate, you will be asked questions about your sexual knowledge, attitudes, behaviors and history. The purpose is to investigate the relationship of these factors to the development and maintenance of eating patterns and attitudes.

You are a member of a purposeful sample which is considered to have the most relevant and important information available concerning these issues. However, your participation in this research project is absolutely voluntary and any decision you make will not effect your patient status or treatment in any way. You may withdraw from the study at any time you wish.

The information being sought is for research purposes and will be held in the strictest of confidence. No one will have access to this information unless you request otherwise, and then only with your permission.

Please keep in mind that we realize that we are asking you very personal questions, some of which may cause you to feel very uncomfortable. Please do the best you can. You are encouraged to talk over any concerns elicited with your therapist.

Your signature below indicates that you have read this agreement and have given your informed consent to participate in this research project.

Thankfully,

Robert A. Welch, M.P.H.
Project Director

Signature of Participant:

_____ Date: _____

Appendix C

BEM SEX ROLE INVENTORY

Name (Optional): _____ Age: _____ Sex _____

Patient I.D. #: _____ Date: _____

DIRECTIONS

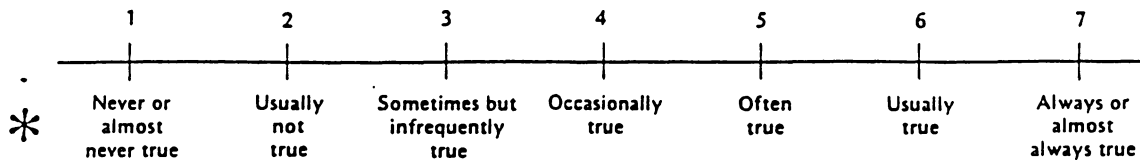
On the next page, you will find listed a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how much you think each characteristic is true of you. Then, next to this number, please indicate the degree to which you would ideally like this characteristic to be true of you. Please do not skip any items.

- Scale: 1 = Never or almost never true.
2 = Usually not true
3 = Sometimes, but infrequently true.
4 = Occasionally true.
5 = Often true.
6 = Usually true.
7 = Always or almost always true.

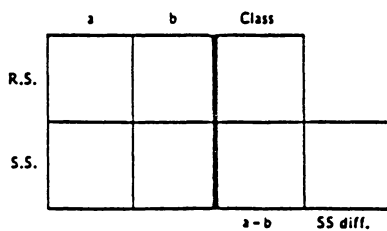
Example: Sly

4 | 2

This indicates that you feel that you are occasionally sly, but that you ideally would prefer to usually not be sly.



Defend my own beliefs	Adaptable	Flatterable
Affectionate	Dominant	Theatrical
Conscientious	Tender	Self-sufficient
Independent	Conceited	Loyal
Sympathetic	Willing to take a stand	Happy
Moody	Love children	Individualistic
Assertive	Tactful	Soft-spoken
Sensitive to needs of others	Aggressive	Unpredictable
Reliable	Gentle	Masculine
Strong personality	Conventional	Gullible
Understanding	Self-reliant	Solemn
Jealous	Yielding	Competitive
Forceful	Helpful	Childlike
Compassionate	Athletic	Likable
Truthful	Cheerful	Ambitious
Have leadership abilities	Unsystematic	Do not use harsh language
Eager to soothe hurt feelings	Analytical	Sincere
Secretive	Shy	Act as a leader
Willing to take risks	Inefficient	Feminine
Warm	Make decisions easily	Friendly



GENERAL EATING DISORDER INFORMATION:

1. HOW WOULD YOU DESCRIBE YOUR CURRENT EATING PROBLEMS?

(1) ANOREXIA (2) BULIMIA (3) OTHER _____

2. AT WHAT AGE WOULD YOU SAY YOUR EATING PROBLEMS STARTED? _____

3. IN YOUR WORDS, WHAT DO YOU THINK CAUSED YOUR EATING DISORDER?

4. HAVE YOU EVER BEEN IN THERAPY? (1) YES (2) NO HOW LONG? _____

5. PLEASE DESCRIBE THE PROBLEM(S) YOU WERE WORKING ON: _____

Appendix D

THE DEROGATIS INVENTORY

Instructions

Below you will be asked to report certain attitudes and opinions, and provide information about some of your sexual experiences. These questions are focused on your thoughts and feelings. Your answers and responses will be kept in the utmost confidence. It will not be made available to anyone else unless you request it.

The inventory is divided into 10 sections, and in each section you are asked something slightly different. In some you are asked to answer questions, while in others you are asked to describe yourself. We also ask about problems you may be having and about some of your sexual thoughts, fantasies, and experiences.

Each section has a brief instruction which will tell you what you are to do in that section. Please work carefully, and do not skip any items. If you have any questions, please ask a counselor or technician to help you.

GENERAL INFORMATION:

1. WHERE WOULD YOU SAY YOU GOT MOST OF YOUR INFORMATION ABOUT SEX AND CONTRACEPTION?

- 1 FRIENDS AND PEERS
- 2 SCHOOL
- 3 PARENTS AND FAMILY
- 4 BOOKS OR MEDIA
- 5 OTHER: _____

2. GENERALLY, WHAT WAS THE ATTITUDE OF YOUR FAMILY OF ORIGIN TOWARDS SEX.

1	2	3	4	5
EXTREMELY NEGATIVE	FAIRLY NEGATIVE	NEUTRAL	FAIRLY POSITIVE	EXTREMELY POSITIVE

3. HOW EASY WOULD YOU SAY IT IS TO TALK ABOUT SEX IN YOUR FAMILY OF ORIGIN?

1	2	3	4	5
EXTREMELY DIFFICULT	FAIRLY DIFFICULT	NEUTRAL	FAIRLY EASY	EXTREMELY EASY

4. DO YOU FEEL LIKE YOU COULD TURN TO YOUR PARENTS IF YOU HAD A PROBLEM OR QUESTION CONCERNING SEX? (1) YES (2) NO

5. WHAT DO YOU THINK IS THE MOST PROBABLE REACTION OF YOUR FAMILY OF ORIGIN TOWARDS YOU CONCERNING YOUR SEXUAL ACTIVITY?

1	2	3	4	5
EXTREMELY NEGATIVE	FAIRLY NEGATIVE	NEUTRAL	FAIRLY POSITIVE	EXTREMELY POSITIVE

6. PLEASE INDICATE THE STATUS OF YOUR CURRENT RELATIONSHIP.

- 1 NO CURRENT RELATIONSHIP
- 2 DATING, UNCOMMITTED
- 3 DATING, COMMITTED
- 4 ENGAGED
- 5 MARRIED

7. HAVE YOU EVER BEEN MARRIED PREVIOUSLY? (1) YES (2) NO

8. IF YES, WHAT IS THE CURRENT STATUS OF THE MARRIAGE:

- 1 SEPARATED HOW LONG? _____
- 2 DIVORCED HOW LONG? _____

9. DO YOU HAVE ANY CHILDREN? (1) YES (2) NO

10. IF YES, HOW MANY? _____ AGES: _____

SECTION II

Below are some statements concerning general information about sexual functioning. Please read each statement carefully. Once you have read it, indicate whether you agree with the statement or not by marking TRUE for those you agree with, and FALSE for those you do not.

	<u>TRUE</u>	<u>FALSE</u>
1. USUALLY MEN ACHIEVE ORGASM MORE QUICKLY THAN WOMEN.....	O	O
2. HAVING INTERCOURSE DURING MENSTRUATION IS NOT A HEALTHY PRACTICE.....	O	O
3. THE PENIS MUST BE ERECT BEFORE EJACULATION MAY OCCUR.....	O	O
4. SIMULTANEOUS ORGASM IS NOT NECESSARY FOR A GOOD SEXUAL RELATIONSHIP.....	O	O
5. MASTURBATION BY EITHER PARTNER IS AN INDICATOR OF POOR MARITAL ADJUSTMENT.....	O	O
6. A WOMAN WHO HAS HAD A HYSTERECTOMY CAN NO LONGER EXPERIENCE ORGASM.....	O	O
7. MEN REACH THE PEAK OF THEIR SEXUAL DRIVE IN THEIR LATE TEENS WHILE WOMEN REACH THEIR PEAK DURING THEIR 30'S.....	O	O
8. A WOMAN CAN BECOME PREGNANT DURING MENSTRUATION.....	O	O
9. MOST MEN AND WOMEN LOSE INTEREST IN SEX AFTER AGE 60.....	O	O
10. A MALE'S ORGASM IS MORE SATISFYING THAN A FEMALE'S ORGASM.....	O	O
11. THE PROPHYLACTIC (RUBBER) PROTECTS AGAINST CONCEPTION AND AGAINST VENEREAL DISEASE.....	O	O
12. LUBRICATION IN THE FEMALE SHOWS SEXUAL EXCITEMENT LIKE THE MALE'S ERECTION.....	O	O
13. ORAL-GENITAL SEX IS UNHEALTHY BECAUSE IT ENHANCES THE POSSIBILITY OF CONTRACTING VENEREAL DISEASE.....	O	O
14. WOMEN WHO HAVE FANTASIES DURING INTERCOURSE ARE DISSATISFIED WITH THEIR SEX LIVES.....	O	O
15. FREQUENCY OF INTERCOURSE IS AN ACCURATE MEASURE OF SUCCESS OF A RELATIONSHIP.....	O	O
16. A WOMAN MAY BE BROUGHT TO ORGASM BY MANUAL STIMULATION OF HER GENITALS.....	O	O
17. MENOPAUSE IN A WOMAN CREATES A SHARP REDUCTION IN HER SEXUAL DRIVE.....	O	O
18. WOMEN DESIRE SEX ABOUT AS FREQUENTLY AS MEN.....	O	O
19. AN EFFECTIVE FORM OF CONTRACEPTION IS DOUCHING AFTER INTERCOURSE.....	O	O
20. AFTER INTERCOURSE THERE IS A PERIOD WHEN A MAN CANNOT RESPOND TO SEXUAL STIMULATION.....	O	O
21. FEMALES CAN MAINTAIN A SEXUAL RESPONSE THROUGH MULTIPLE ORGASMS.....	O	O
22. MOST WOMEN ARE ABLE TO ENJOY SEX EVEN WITHOUT EXPERIENCING ORGASM.....	O	O
23. THE BIGGER THE PENIS THE MORE SATISFYING IT IS TO THE FEMALE IN INTERCOURSE.....	O	O
24. A WOMAN CAN NO LONGER BECOME PREGNANT ONCE MENOPAUSE HAS BEGUN...	O	O
25. ERECTION IN THE MALE IS BROUGHT ABOUT BY CONGESTION OF BLOOD IN THE PENIS.....	O	O
26. THE CLITORIS IS NOT A PARTICULARLY SENSITIVE AREA OF THE FEMALE'S GENITALS.....	O	O

SECTION III

Below are a list of sexual experiences that people have. We would like to know which of these sexual behaviors you have experienced. Please indicate those experienced. Please indicate those experiences you have personally had by placing a check ([]) under the YES column for that experience. If you have not had the experience place your check under the NO column. In addition, if you have had the experience during the past two months please place an additional check under the column marked PAST 60 DAYS. Make your marks carefully and do not skip any items.

	YES	NO	PAST 60 DAYS
1. MALE LYING PRONE ON FEMALE (CLOTHED)	[]	[]	[]
2. STROKING AND PETTING YOUR SEXUAL PARTNER'S GENITALS	[]	[]	[]
3. EROTIC EMBRACE (CLOTHED)	[]	[]	[]
4. INTERCOURSE-VAGINAL ENTRY FROM REAR	[]	[]	[]
5. HAVING GENITALS CARESSED BY YOUR SEXUAL PARTNER	[]	[]	[]
6. MUTUAL ORAL STIMULATION OF GENITALS	[]	[]	[]
7. ORAL STIMULATION OF YOUR PARTNER'S GENITALS	[]	[]	[]
8. INTERCOURSE SIDE-BY-SIDE	[]	[]	[]
9. KISSING OF SENSITIVE (NON-GENITAL) AREAS OF THE BODY	[]	[]	[]
10. INTERCOURSE--SITTING POSITION	[]	[]	[]
11. MASTURBATING ALONE	[]	[]	[]
12. MALE KISSING FEMALE'S NUDE BREASTS	[]	[]	[]
13. HAVING YOUR ANAL AREA CARESSED	[]	[]	[]
14. BREAST PETTING (CLOTHED)	[]	[]	[]
15. CARESSING YOUR PARTNER'S ANAL AREA	[]	[]	[]
16. INTERCOURSE--FEMALE SUPERIOR POSITION	[]	[]	[]
17. MUTUAL PETTING OF GENITALS	[]	[]	[]
18. HAVING YOUR GENITALS ORALLY STIMULATED	[]	[]	[]
19. MUTUAL UNDESSING OF EACH OTHER	[]	[]	[]
20. DEEP KISSING	[]	[]	[]
21. INTERCOURSE--MALE SUPERIOR POSITION	[]	[]	[]
22. ANAL INTERCOURSE	[]	[]	[]
23. KISSING ON THE LIPS	[]	[]	[]
24. BREAST PETTING (NUDE)	[]	[]	[]

SECTION IV

Below we would like you to indicate the frequency with which you typically engage in certain sexual activities. Please indicate how often you experience each of the sexual activities below by checking ([]) the category that is closest to your personal frequency. Categories range from "NOT AT ALL" to "4 OR MORE TIMES A DAY". Please do not skip any items.

	NOT AT ALL	LESS THAN 1 A MONTH	1-2 A MONTH	1 A WEEK	2-3 A WEEK	4-6 A WEEK	1 A DAY	2-3 A DAY	4 OR MORE A DAY
1. INTERCOURSE	[]	[]	[]	[]	[]	[]	[]	[]	[]
2. MASTURBATION	[]	[]	[]	[]	[]	[]	[]	[]	[]
3. KISSING AND PETTING	[]	[]	[]	[]	[]	[]	[]	[]	[]
4. SEXUAL FANTASIES	[]	[]	[]	[]	[]	[]	[]	[]	[]

5. WHAT WOULD BE YOUR IDEAL FREQUENCY OF SEXUAL INTERCOURSE? _____
6. AT WHAT AGE DID YOU FIRST BECOME INTERESTED IN SEXUAL ACTIVITY? _____
7. AT WHAT AGE DID YOU FIRST HAVE SEXUAL INTERCOURSE? _____
- CURRENT AGE: _____
8. SINCE BECOMING SEXUALLY ACTIVE, HOW MANY PARTNERS WOULD YOU SAY YOU HAVE HAD IN YOUR LIFETIME? _____
9. ARE YOU CURRENTLY SEXUALLY ACTIVE? (1) YES (2) NO
10. IF YES, WHAT CONTRACEPTIVE METHOD ARE YOU USING? _____
11. WHAT CONTRACEPTIVE METHOD HAVE YOU USED IN THE PAST? _____
12. HAVE YOU EVER BEEN PREGNANT OR SERIOUSLY AFRAID YOU WERE PREGNANT? (1) YES (2) NO
13. IF YES, WHAT WAS THE OUTCOME? _____
14. HAVE YOU EVER TRIED UNSUCCESSFULLY TO GET PREGNANT? (1) YES (2) NO

SECTION V

Below area a series of statements about various aspects of sexual behavior. We would like to know to what extent you agree or disagree with each one. Please indicate how much you agree or disagree with each statement by placing the appropriate number from the alternatives below in the space alongside the statement. Please do not skip any statements.

- | <u>1</u>
STRONGLY
DISAGREE | <u>2</u>
DISAGREE | <u>3</u>
NEITHER
AGREE NOR DISAGREE | <u>4</u>
AGREE | <u>5</u>
STRONGLY
AGREE | |
|----------------------------------|----------------------|---|-------------------|-------------------------------|---|
| 1. | [] | | | | PREMARITAL INTERCOURSE IS BENEFICIAL TO LATER MARITAL ADJUSTMENT |
| 2. | [] | | | | HOMOSEXUALITY IS PERVERSE AND UNHEALTHY |
| 3. | [] | | | | SEX IS MORALLY RIGHT ONLY WHEN IT IS INTENDED TO PRODUCE CHILDREN |
| 4. | [] | | | | ORAL SEX CAN BE AS PLEASURABLE AS INTERCOURSE |
| 5. | [] | | | | IT IS UNNATURAL FOR THE FEMALE TO BE THE INITIATOR IN SEXUAL RELATIONS |
| 6. | [] | | | | MASTURBATION IS A PERFECTLY NORMAL, HEALTHY SEXUAL BEHAVIOR |
| 7. | [] | | | | EXTRAMARITAL SEX INEVITABLY LEADS TO SERIOUS PROBLEMS AND GREAT DIFFICULTY IN THE MARRIAGE |
| 8. | [] | | | | WOMEN SHOULD NEVER BE CONSCIOUSLY SEDUCTIVE BUT SHOULD WAIT UPON THE ATTENTIONS OF THE MAN |
| 9. | [] | | | | VIEWING EROTIC FILMS IS ENJOYABLE AND STIMULATING BEHAVIOR |
| 10. | [] | | | | MALES AND FEMALES SHOULD ASSUME BOTH ASSERTIVE AND PASSIVE ROLES DURING INTERCOURSE AND FOREPLAY |
| 11. | [] | | | | MOST HOMOSEXUALS ARE HIGHLY DISTURBED PEOPLE AND A DANGER TO SOCIETY |
| 12. | [] | | | | ANY SEXUAL BEHAVIOR BETWEEN TWO CONSENTING ADULTS SHOULD BE VIEWED AS NORMAL |
| 13. | [] | | | | MORALITY SHOULD NOT BE A CONSIDERATION IN SEXUAL BEHAVIOR |
| 14. | [] | | | | DRESSING IN VARIOUS COSTUMES TO ENHANCE SEXUAL ENJOYMENT SHOULD BE VIEWED AS CREATIVE SEX |
| 15. | [] | | | | BOOKS WHICH CONTAIN PASSAGES EXPLICITLY DESCRIBING SEXUAL ACTS ARE USUALLY JUST TRASH |
| 16. | [] | | | | COUPLES THAT HAVE SEX BEFORE MARRIAGE USUALLY REGRET IT LATER ON |
| 17. | [] | | | | WIFESWAPPING IS ACCEPTABLE IF ALL FOUR PARTNERS AGREE |
| 18. | [] | | | | MALES LOSE RESPECT FOR FEMALES WHO ALLOW THEM TO HAVE PREMARITAL INTERCOURSE |
| 19. | [] | | | | MUTUAL MASTURBATION IN A MARRIED COUPLE IS A POOR SUBSTITUTE FOR INTERCOURSE |
| 20. | [] | | | | PROSTITUTES ARE IMMORAL AND DEGRADING AND HAVE NO PLACE IN SOCIETY |
| 21. | [] | | | | HUMAN GENITALS ARE SOMEWHAT DISGUSTING TO LOOK AT |
| 22. | [] | | | | HOLDING AND TOUCHING MY PARTNER'S BODY IS EXCITING AND THRILLING |
| 23. | [] | | | | GROUP SEX IS A BIZARRE AND DISGUSTING IDEA |
| 24. | [] | | | | EXTRAMARITAL SEXUAL AFFAIRS CAN MAKE PEOPLE BETTER MARITAL PARTNERS |
| 25. | [] | | | | COUPLES SHOULD EXPERIMENT WITH VARIOUS POSITIONS OF INTERCOURSE TO ENHANCE THEIR SEXUAL EXPERIENCES |
| 26. | [] | | | | MASTURBATION FANTASIES ARE HEALTHY FORMS OF SEXUAL RELEASE |
| 27. | [] | | | | HOMOSEXUALITY IS SIMPLY A QUESTION OF SEXUAL ORIENTATION AND NOT GOOD OR BAD, SICK OR HEALTHY |
| 28. | [] | | | | ORAL-GENITAL SEX IS NOT WITHIN THE RANGE OF NORMAL SEXUALITY |
| 29. | [] | | | | A PICTURE OF A NUDE WOMAN CAN BE A BEAUTIFUL AND EXCITING THING TO LOOK AT |
| 30. | [] | | | | PORNOGRAPHY IS PERVERSE AND DISGUSTING IN GENERAL AND PARTICULARLY HARMFUL IN THE HANDS OF YOUNG PEOPLE |

SECTION VI

In this section we have listed a variety of sexual ideas and fantasies that people sometimes have. We would like you to indicate which of these fantasies you have experienced either in daydreams or dreams while asleep. For each fantasy that you have experienced place a check ([]) in the space alongside that item.

-
1. [] HAVING MORE THAN ONE SEXUAL PARTNER AT THE SAME TIME
 2. [] HAVING INTERCOURSE IN UNUSUAL POSITIONS
 3. [] HAVING SEXUAL RELATIONS WITH ANIMALS
 4. [] WHIPPING OR BEATING YOUR SEXUAL PARTNER
 5. [] FORCING A PARTNER TO SUBMIT TO SEXUAL ACTS
 6. [] DRESSING IN CLOTHES OF THE OPPOSITE SEX
 7. [] USING ARTIFICIAL DEVICES FOR SEXUAL STIMULATION
 8. [] BEING A PROSTITUTE
 9. [] FORBIDDEN LOVER OR MISTRESS IN SEXUAL ADVENTURES
 10. [] HOMOSEXUAL FANTASIES
 11. [] MATESWAPPING FANTASIES
 12. [] BEING TIED UP OR BOUND DURING SEXUAL ACTIVITIES
 13. [] DEGRADING A SEX PARTNER
 14. [] BEING SEXUALLY DEGRADED
 15. [] ANAL INTERCOURSE
 16. [] DRESSING IN EROTIC GARMENTS
 17. [] SEXUAL INTERCOURSE
 18. [] FANTASIZING THAT YOU ARE OF THE OPPOSITE SEX
 19. [] ORAL-GENITAL SEX
 20. [] BEING FORCED TO SUBMIT TO SEXUAL ACTS
-

21. IN GENERAL, HOW DIFFICULT WOULD YOU SAY IT IS FOR YOU TO START A NEW ROMANTIC OR SEXUAL RELATIONSHIP?

1	2	3	4	5
EXTREMELY EASY	EASY	NEUTRAL	DIFFICULT	EXTREMELY DIFFICULT

22. ONCE A RELATIONSHIP IS STARTED, HOW DIFFICULT IS IT FOR YOU TO KEEP IT GOING?

1	2	3	4	5
EXTREMELY EASY	EASY	NEUTRAL	DIFFICULT	EXTREMELY DIFFICULT

SECTION VII

Below are some statements concerning how you view your body. Please indicate to what degree each of the following statements is true of you by circling the number that best describes your experience. Note that Part A is for both sexes, Part B is for men only, and Part C is for women only.

	<u>Not at</u>			
	<u>All</u>	<u>Moderate</u>	<u>Extreme</u>	
<u>PART A (BOTH SEXES)</u>				
1. I AM LESS ATTRACTIVE THAN I WOULD LIKE TO BE	0	1	2	3 4
2. I AM TOO FAT	0	1	2	3 4
3. I ENJOY BEING SEEN IN A BATHING SUIT	0	1	2	3 4
4. I AM TOO THIN	0	1	2	3 4
5. I WOULD BE EMBARRASSED TO BE SEEN NUDE BY A LOVER	0	1	2	3 4
6. I AM TOO SHORT	0	1	2	3 4
7. THERE ARE PARTS OF MY BODY I DON'T LIKE AT ALL	0	1	2	3 4
8. I AM TOO TALL	0	1	2	3 4
9. I HAVE TOO MUCH BODY HAIR	0	1	2	3 4
10. MY FACE IS ATTRACTIVE	0	1	2	3 4
 <u>PART B (MEN ONLY)</u>				
11. I HAVE A WELL-PROPORTIONED BODY	0	1	2	3 4
12. I AM SATISFIED WITH THE SIZE OF MY PENIS	0	1	2	3 4
13. WOMEN WOULD FIND MY BODY ATTRACTIVE	0	1	2	3 4
14. I AM WELL-COORDINATED AND ATHLETIC	0	1	2	3 4
15. I AM PLEASED WITH THE PHYSICAL CONDITION OF MY BODY	0	1	2	3 4
 <u>PART C (WOMEN ONLY)</u>				
16. I HAVE A SHAPELY AND WELL-PROPORTIONED BODY	0	1	2	3 4
17. I HAVE ATTRACTIVE BREASTS	0	1	2	3 4
18. MEN WOULD FIND MY BODY ATTRACTIVE	0	1	2	3 4
19. I HAVE ATTRACTIVE LEGS	0	1	2	3 4
20. I AM PLEASED WITH THE WAY MY VAGINA LOOKS	0	1	2	3 4

SECTION VIII

Below are some statements about sexual satisfaction. Please indicate whether each statement is true of you by checking either true or false for each item.

	TRUE	FALSE
1. USUALLY, I AM SATISFIED WITH MY SEXUAL PARTNER	T	F
2. I FEEL I DO NOT HAVE SEX FREQUENTLY ENOUGH	T	F
3. THERE IS NOT ENOUGH VARIETY IN MY SEX LIFE	T	F
4. USUALLY AFTER SEX I FEEL RELAXED AND FULFILLED	T	F
5. USUALLY, SEX DOES NOT LAST LONG ENOUGH .	T	F
6. I AM NOT VERY INTERESTED IN SEX	T	F
7. USUALLY, I HAVE A SATISFYING ORGASM WITH SEX	T	F
8. FOREPLAY BEFORE INTERCOURSE IS USUALLY VERY AROUSING FOR ME	T	F
9. OFTEN, I WORRY ABOUT MY SEXUAL PERFORMANCE	T	F
10. USUALLY, MY PARTNER AND I HAVE GOOD COMMUNICATION	T	F

SECTION IX

GSSI - below is a rating scale upon which we would like you to record your personal evaluation of how satisfying your sexual relationship is. The rating is simple. Make your evaluation by placing a check in the appropriate box that best describes your present sexual relationship.

- 8 COULD NOT BE BETTER
- 7 EXCELLENT
- 6 GOOD
- 5 ABOVE AVERAGE
- 4 ADEQUATE
- 3 SOMEWHAT INADEQUATE
- 2 POOR
- 1 HIGHLY INADEQUATE
- 0 COULD NOT BE WORSE

SECTION X

Before ending this survey you will be asked several questions concerning possible sexual conflict and abuse in your past. Please do the best you can with these questions and answer them as fully as you can.

1. Have you ever been touched or fondled in a way that was inappropriately sexual?

(1) YES (2) NO

2. If yes, do you remember how old you were?

(1) YES (2) NO HOW OLD? _____

3. Who was involved? What was their relationship to you?

4. What was the extent of the touching? How long did it continue?

5. Did you report or tell anyone?

(1) YES (2) NO

6. Have you ever had sexual intercourse or activity against your will?

(1) YES (2) NO

7. Generally, can you describe the situation? Who was involved? What was the outcome?

8. Have you had any other severely negative sexual experiences?

(1) YES (2) NO

9. Please describe:

10. For any negative sexual experiences you have had, do you blame yourself or hold yourself responsible?

(1) YES (2) NO

THANK YOU FOR YOUR HELP

KLEIN SEXUAL ORIENTATION GRID (KSOG)

With the questions that follow, you are being asked to describe various aspects of your social life and sexuality. For each question please answer with three numbers: past (your life since age 20), present (your life within the last twelve months), and ideal (where you would like to be on the individual scales). Please place the numbers under the corresponding headings. The significance of the numbers themselves are as follows:

1	2	3	4	5	6	7	
women only	women mostly men occasionally	women somewhat more than men	men and women equally	men somewhat more than women	men mostly women occasionally	men only	
				PAST	PRESENT	IDEAL	
I find that I am sexually attracted to:				_____	_____	_____	
My sexual fantasy life involves:				_____	_____	_____	
With regard to behavior, I have sex with:				_____	_____	_____	
Emotionally, I am closest to and depend on:				_____	_____	_____	
I tend to socialize with:				_____	_____	_____	

Appendix E

KSOG (continued)

1	2	3	4	5	6	7
hetero- sexual only	hetero- sexual mostly	hetero- sexual somewhat more than homosexual	Equally hetero- sexual and homo- sexual	homo- sexual somewhat more than hetero- sexual	homo- sexual mostly	homo- sexual only

	PAST	PRESENT	IDEAL
--	------	---------	-------

In terms of my lifestyle, the people with whom I spend time are:

	_____	_____	_____
--	-------	-------	-------

As I define myself sexually, I am best described by the numbers:

	_____	_____	_____
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