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A Comparison of Interpersonal Behavior Traits and Spiritual Well-Being Among Eating-Disordered Patients and Medical Outpatients

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by

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Abstract

A diagnosed eating disorder sample was compared with a sample of medical outpatients on interpersonal behavior traits and spiritual well-being. Instruments used included the Interpersonal Behavior Survey and the Spiritual Well-Being Scale. A demographic questionnaire was also administered to explore the relationship between demographic variables and the measures of interpersonal behavior traits and spiritual well-being. The sample included all Caucasian female subjects between ages 17-60, representing a range of financial conditions, educational levels, and marital status.

Data analysis using an ANOVA with Scheffe post-hoc test demonstrated that the eating disorder inpatient group differed significantly from the medical outpatients in assertiveness, aggressiveness, relationship variables, and spiritual well-being. Inpatients with eating disorders were lower in assertiveness, higher in aggressiveness, more dependent and more shy than the medical outpatients.

Both inpatients and outpatients with eating disorders experienced less existential, religious, and spiritual well-being than the medical outpatients.

The implications of this study are relevant for both diagnosis and treatment of eating disorders. The use of the IBS with patients with eating disorders may be helpful in ascertaining specific problems with aggressiveness, assertiveness, and interpersonal relationships. The clear distinction between assertiveness and aggressiveness provided by the IBS will help to eliminate the danger of increasing aggression through "assertiveness training." The existential and spiritual well-being of individuals with eating disorders are areas that deserve attention by those treating eating disorders.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

In the latter part of the 1970's increased reports began to appear in both professional journals and popular magazines concerning the eating disorders of anorexia nervosa and bulimia. Anorexia nervosa is a syndrome of compulsive dieting, fear of obesity, and severe weight loss. The syndrome of bulimia is characterized by eating binges, followed by self-induced vomiting or laxative abuse.

Although estimates of the prevalence of eating disorders vary widely, these disorders are certainly widespread enough to warrant attention by the mental health professions. No comprehensive theory of anorexia nervosa and bulimia exists, but there are several well-educated guesses regarding the etiologies of these disorders, based primarily upon clinical observations. Factors which are believed to contribute to the development and maintenance of anorexia and bulimia include stressful life

situations, early childhood trauma, the adjustments of adolescence, cultural influences, biological predisposition, endocrinological anomalies, nutrition, family issues and peer relationships (Neuman & Halvorson, 1983; Lacey, Coker, & Birtchnell, 1986; Strober, 1984; Mitchell & Pyle, 1985). This study focuses on the psychosocial factors which contribute to eating disorders. One such psychosocial factor discussed often in the literature on eating disordered individuals is their lack of assertiveness and poor interpersonal relationships (Cantelon, Leichner, & Harper, 1986).

The deficient interpersonal relationships of those with eating disorders may contribute to an overall poor sense of well-being in several realms of their lives. An individual's sense of well-being has been found to be due primarily to interpersonal satisfaction. Three basic needs of individuals have been identified as being essential to a person's sense of well-being: the need for having, the need for relating, and the need for being or self-actualization (Campbell, Converse, & Rondgers, 1976; Campbell, 1981). A fourth essential requirement for a sense of well-being has more recently been identified, the need

for transcendence, which involves finding ultimate meaning in life, or what one might call the spiritual dimension of life (Ellison, 1983).

This spiritual dimension, termed "spiritual well-being" by Ellison and Paloutzian (1978) has been found to be positively related to many interpersonal variables, such as memories of family closeness during childhood, perceived social competence, perceived quality of parent-child relationships, and childhood peer relations (Campise, Ellison & Kinsman, 1979; Ellison & Paloutzian, 1978; Paloutzian & Ellison, 1982). Spiritual well-being was found to be negatively correlated with loneliness (Ellison & Cole, 1982; Paloutzian & Ellison, 1979a, 1979b; Ellison & Paloutzian, 1978). These variables, and similar interpersonal factors, have also been identified as potential contributors to the development of eating disorders. Subsequent sections of this study will review these factors.

What is the relationship between spiritual well-being and interpersonal relationship skills, such as assertiveness? Spiritual well-being has been found to correlate positively with assertiveness in four studies to date. Among a population of seminary

students Bufford and Parker (1985) ascertained that spiritual well-being was positively correlated with five dimensions of assertiveness and negatively correlated with aggressiveness. In studying a sample of medical outpatients Hawkins (1986) found spiritual well-being to be positively correlated with assertiveness and negatively correlated with aggression. Campbell (1983) also noted a positive relationship between assertiveness and spiritual well-being for patients with renal failure who were undergoing hemodialysis. A study of chronic pain patients yielded further evidence that spiritual well-being and assertiveness were positively correlated (Mullins, 1986).

Only one study, utilizing a sample of male sociopaths, has attempted to assess the spiritual well-being of a psychiatric population (Agnor, 1986). There is a need for further research with psychiatric populations to explore the relationship between spiritual health or well-being and psychological health, as indicated by such factors as interpersonal relationship skills.

In summary, eating disorders are an area of psychological study greatly in need of further empirical research, particularly in the psychosocial areas, such as the interpersonal skills of assertiveness and its components. Furthermore, a number of limitations exist within the current research regarding assertiveness and its relationship to spiritual well-being, particularly for clinical populations such as those with eating disorders. The primary purpose of this study will be to empirically investigate the interpersonal behavior of assertiveness for clients with eating disorders. A second purpose of this study will be to enhance our understanding of the relationship between assertiveness and spiritual well-being for eating disordered individuals. The third purpose will be to contribute to the growing body of knowledge about the integration of psychological and theological constructs.

This introductory chapter will consist of four parts: (a) a review of literature related to eating disorders, with emphasis on the interpersonal relationships of such individuals; (b) a review of background literature of the concept of assertiveness;

(c) a review of spiritual well-being literature and research; and (d) definition of the hypotheses and related research questions for this study.

Literature Review: Eating Disorders, Assertiveness, and Spiritual Well-Being

Eating Disorders

Definitions

The 3rd edition of the Diagnostic and Statistical Manual (DSM III) of the American Psychiatric Association (1980) identifies two separate eating disorders with which this paper is concerned: anorexia nervosa and bulimia. The criteria required by the DSM III for anorexia nervosa are:

A. Intense fear of becoming obese, which does not diminish as weight loss progresses.

B. Disturbance of body image, e.g., claiming to "feel fat" even when emaciated.

C. Weight loss of at least 25% of original body weight or, if patient is under 18 years of age, weight loss from original body weight plus projected weight gain expected from growth charts may be combined to make the 25%.

D. Refusal to maintain body weight over a minimal normal weight for age and height.

E. No known physical illness that would account for the weight loss.

In the 1980 edition, the DSM III first recognized bulimia as a separate diagnostic category, requiring the following criteria:

A. Recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period of time, usually less than two hours).

B. At least 3 of the following:

(1) consumption of high-caloric, easily ingested food during a binge

(2) inconspicuous eating during a binge

(3) termination of such eating episodes by abdominal pain, sleep, social interruption, or self-induced vomiting

(4) repeated attempts to lose weight by severely restrictive diets, self-induced vomiting, or use of cathartics or diuretics

(5) frequent weight fluctuations greater than ten pounds due to alternating binges and fasts

C. Awareness that the eating pattern is abnormal and fear of not being able to stop eating voluntarily.

D. Depressed mood and self-deprecating thoughts following eating binges.

E. The bulimic episodes are not due to Anorexia Nervosa or any known physical disorder.

While there exists extensive debate over the distinctions between bulimia and anorexia (Russell, 1979; Mitchell & Pyle, 1985; Garner, Garfinkel & O'Shaughnessy, 1985), for the purposes of this study, the DSM III criteria will be used. A brief overview of eating disorders will be provided, with particular emphasis on the interpersonal relationships of those with eating disorders. Although this study is primarily concerned with bulimia, anorexia will be discussed because of its close similarity to bulimia. In fact, depending upon the population studied, somewhere between 10% and 50% of bulimic individuals have a past or current history of anorexia nervosa (Pope & Hudson, 1984).

Anorexia Nervosa

The term "anorexia nervosa" was first used in 1874 by Dr. William Gull in London. From the late 19th century through the beginning of the 20th

century, the psychoanalytic school of thought dominated the views of this disorder. Analysts maintained that anorexics have conflicts around their emerging sexuality and seek to make themselves prepubescent again, which they can only achieve through starvation (Kinoy, 1984; Andersen, 1985).

Hilde Bruch, a widely recognized authority on eating disorders, heralded the "modern era" of anorexia nervosa with her writings in the early 1960's (Neuman & Halvorson, 1983). Bruch and others, such as Minuchin and Palozzoli, identified the importance of the social context in which eating disorders occur (Bruch, 1973; Palozzoli, 1978; Minuchin, Rosman, & Baker, 1978). Bruch specifically identified the ineffectiveness and powerlessness that the anorexic feels. She saw anorexia as an attempt to achieve some sense of identity. Minuchin identified four issues in the families of anorexics, including enmeshment, rigidity, overprotectiveness, and lack of conflict resolution. Not only are their family relationships troubled, but anorexics also have difficulty in dealing with peers. Jones (1981) labeled the anorexic as typically having an absence of close friendships.

How prevalent is the syndrome of anorexia nervosa today? Is its occurrence sufficient to warrant the attention of those in the mental health fields? The most recent and extensive survey, totalling 1060 college and high school students, indicated that 1% to 4% of women met the DSM III criteria for anorexia nervosa.

In more recent literature the interpersonal relationship difficulties of the anorexic continues to be noted, both theoretically and empirically. Bruch stressed that the therapeutic focus with these individuals should be on their defective tools for expressing their needs, bewilderment in dealing with others, sense of isolation, and underlying sense of incompetence (Bruch, 1983). Both Bruch (1985) and Goodsitt (1985) utilize the theory of self psychology, as systematized by Kohut (1971), for an understanding of anorexia. Anorexics are seen as having an inadequate self-concept, which is most likely due to an unfavorable interaction with the environment as a child. They can easily be exploited and influenced because of their deficiency in self-regulatory structure.

As nearly all anorexics are females, some approach an understanding of this disorder from a feminist theoretical perspective. Anorexics are viewed as pursuing thinness as a desire to be feminine, which includes assumptions of dependency, passivity, and lack of assertiveness (Bruch, 1973, 1978; Boskind-Lodahl, 1976). Sitnick and Katz (1984) have a compatible view, which maintains that anorexics may not have adequately developed the masculine traits necessary for optimal functioning in today's society. Therefore they lack adequate assertiveness and are overly concerned with pleasing others (Cantelon et al., 1986).

From a psychoanalytic and feminist viewpoint of female psychology, Eichenbaum and Orbach (1983) maintain that all women have two deeply internalized taboos which are socially reinforced. These taboos prohibit the expression of dependency needs and initiating behavior. Each of these taboos would be anticipated to contribute to a lack of assertiveness and deficits in interpersonal behavior skills. Orbach (1985) specifically relates these two taboos to the development of anorexia nervosa, with particular emphasis on the extent of women's repression of their

needs for dependency and nurturance. This theory would imply that individuals with anorexia nervosa would have particular difficulty in requesting help from others.

With the onset of anorexia a previously compliant child begins to assert herself in the area of food, thereby achieving some control, defiance and self-assertion. Where she generally could not accomplish any sense of control in her interpersonal relationships, she now displaces her need for control from the external events to her eating habits (Mintz, 1985).

Anorexic individuals have difficulty in relationships not only with their families, but also struggle in peer relationships. Investigations into the association between eating disorders and social maladjustment have found women with anorexia nervosa to be significantly less well-adjusted than normal women (Thompson & Schwartz, 1980). In follow-up studies of anorexics who had been through treatment, Hsu (1980) reported that less than half demonstrated adequate marital/social adjustment, which indicates a need for treatment programs to focus attention on the development of relationship-building skills.

While many factors contribute to the development and maintenance of anorexia nervosa, it is clear that deficits in interpersonal relationships are one crucial area that deserve further attention. Particular attention is needed in developing empirical support for the theories of anorexia. Deficits in interpersonal relationships are also characteristic of those with anorexia's "sister disorder" of bulimia.

Bulimia

Bulimia was formally recognized as a separate entity only as recently as 1980 when the DSM III listed it as a diagnosis apart from anorexia nervosa. In 1973 bulimia was called a "rare disorder" (Bruch, 1973). The incidence of bulimia is certainly no longer rare, as evidenced by current estimates of the prevalence of binge eating. Although bulimia is about four times as common as anorexia, anorexia is much better known to the public because of its more visible symptoms (Pope, Hudson, Yergelun-Todd, & Hudson, 1984).

Recent studies of the incidence of binge eating behavior have included ranges from 54% to 86% for college women (Halmi, Falk & Schwartz, 1981; Hawkins & Clement, 1980; Katzman, Wolchik, & Braver, 1984;

Ondercin, 1979). These estimates are probably excessively high, as the studies do not apply the stringent DSM III requirements for the syndrome of bulimia. Estimates for college students who fulfill the criteria for a DSM III diagnosis of bulimia range from 3.9% to 19% (Halmi et al., 1981; Katzman et al., 1984; Pyle, Mitchell, Eckert, Halvorson, Neuman, & Goff, 1983). A survey of college and high school students indicated that 6.5% to 18.6% of women met the DSM III criteria for bulimia (Pope, Hudson, Yergelun-Todd & Hudson, 1984).

Clients who seek treatment for bulimia are generally women in their mid-20s who developed the disorder in their late teens (Pyle, Mitchell, & Eckert, 1981; Russell, 1979). Although much of the literature on bulimia is reported on high school and college age women, in populations outside the high school and college campus bulimia is also surprisingly common.

In a community setting of suburban women shoppers, a 10.3% prevalence rate was found for binge eating, with 5% actively bulimic (Pope, Hudson, & Yergelun-Todd, 1984). Hart and Ollendic (1985) found binge eating in 41% of a sample of working women and

69% of university women students. Of this sample 1% of the working women and 5% of the university women met the criteria for the syndrome of bulimia.

The impact of bulimia on the U.S. may be much more extensive than these studies suggest, as one author estimates that at least 10% of the middle class population at some time in their lives use vomiting or other purging as a means of weight control (Andersen, 1985). The number of Americans who develop serious cases of bulimia, with at least weekly bingeing and purging is estimated to be between one and three million (Pope & Hudson, 1984).

While anorexic individuals are fairly easily identifiable because of their extreme weight loss, many bulimic women may not be recognized as having the disorder, as they are typically of normal weight, often with no history of anorexia or obesity (Thompson & Schwartz, 1980; Boskind-Lodahl, 1976; Hawkins & Clement, 1980; Pyle et al., 1981). Yet their problem, if untreated, may have devastating physiological effects, including damage to the esophagus and teeth from the harmful hydrochloric stomach acid resulting from vomiting.

Often a dentist is the first to recognize the problem of bulimia from the erosion of the tooth enamel. Purging through vomiting creates additional problems, such as fatigue, headaches, and anxiety. These problems result from a condition called alkalosis which is caused by an increase in the body's pH after loss of stomach acids. Alkalosis also increases susceptibility to urinary tract infections which may result in kidney damage. Stomach juices also contain essential minerals called electrolytes, which are lost in frequent vomiting. Electrolyte deficiencies can cause such problems as muscle cramps, weakness, abnormalities of the heartbeat, and damage to the bones.

Excessive use of laxatives irritates the intestine and results in decreased nutrient absorption. Over time the intestines can lose their ability to contract. Use of diuretics, or water pills, may result in dehydration and loss of potassium and acid. Even bingeing without any methods of purging creates problems for the bulimic, such as lessening the ability of the stomach to effectively contract.

Numerous studies of populations of bulimics have yielded knowledge about the psychological characteristics of those afflicted with this disorder. Factors which have been implicated in bulimia include depression, stress, external locus of control, lack of assertiveness, low self-esteem, and ineffective coping. Research using personality test data has supported the view that bulimics are more impulsive than controls (Dunn & Ondercin, 1981; Johnson & Larson, 1982; Pyle et al., 1981). Psychological inventories such as the 16 PF, California Psychological Inventory, and Minnesota Multiphasic Personality Inventory have produced descriptions of bulimics as feeling dependent, helpless, and inadequate (Boskind-Lodahl & White, 1978; White & Boskind-White, 1981).

Many bulimics report that they eat when they feel depressed or anxious (Weiss, Katzman, & Wolchik, 1985). In a survey of 316 cases, bulimic individuals were reported to binge following depression, loneliness, boredom, and anger. This same study cited bulimics as having difficulty with depression and interpersonal sensitivity (Johnson, Stuckey, Lewis, & Schwartz, 1982).

Diagnosis: Anorexia vs. Bulimia

The relationship between anorexia nervosa and bulimia remains unclear. Historically, bulimia was believed to be a variant of anorexia nervosa. This view began to change in 1974 when Marlene Boskind-White coined the term "bulimarexia" to describe the compulsive bingeing/purging syndrome as unique from anorexia nervosa (Boskind-White & White, 1983). Other terms which have been used to describe both the symptom and the syndrome of bulimia include: thinfats (Bruch, 1973), bulimia nervosa (Rosen & Leitenberg, 1982; Russell, 1979), vomiters and purgers (Beumont, George & Smart, 1976), and compulsive eaters (Green & Rau, 1974). For the purposes of this study bulimia will refer to women of average weight who are suffering from the DSM III defined syndrome of bulimia.

Several researchers view both anorexia and bulimia as part of a broader pattern of disordered eating in anorexia nervosa (Heilbrun & Bloomfield, 1986; Russell, 1979). Others maintain that the two eating patterns are independent (Casper, Eckert, Halmi, Goldberg, & Davis, 1980; Garfinkel, Moldofsky, & Garner, 1980). Kinoy (1984) disagrees with the DSM

III's distinction of anorexia and bulimia as separate disorders because of the fluctuations from anorexia to bulimia that many individuals undergo during the course of the illness. Heilbrun and Bloomfields' (1986) conclusion, until more critical evidence is available, is that anorexic and bulimic symptoms may occur either in isolation or may be found within a more complex eating disorder. This study will follow the DSM-III definitions, considering anorexia nervosa and bulimia as separate disorders, yet acknowledging the relationship between them.

Theories of Eating Disorders

The current theories of eating disorders can be roughly divided into four major schools of thought: psychodynamic and family theories, behavioral theories, sociocultural theories, and biological theories. Because bulimia is such a new diagnosis, much of the literature on eating disorders is based upon those with anorexia. A consideration of the disorders together seems appropriate when one considers that 50% of patients with anorexia also evidence bulimia at some point.

The psychodynamic view of anorexia sees the disorder as representing a fear of oral impregnation.

Bulimia, however, represents gratification of the fantasy of becoming pregnant, as expressed by gorging. Another way of explaining these seemingly discrepant ideas is that the individual unconsciously fears pregnancy, but occasionally becomes unconsciously obsessed with a desire to become pregnant. Hilde Bruch (1973) reported that few of her anorexic patients feared oral impregnation, but instead had little sexual drive. She stated that anorexic patients were not responsive to the traditional psychoanalytic approach.

Bruch turned her focus from unconscious conflicts to the family of the anorexic, suggesting that an overcontrolling family prevents the child from becoming aware of her own bodily needs (Bruch, 1973). Both anorexia and bulimia were described as part of the struggle to gain control over one's functions during adolescence. Recent studies of the dynamics of families of those with eating disorders have led to little conclusive evidence. Pope and Hudson (1984) state that they "cannot find reliable scientific evidence of any specific abnormality in the behavior of families of anorexic or bulimic patients" (p. 81).

Behavioral theorists view the bingeing behavior of the bulimic as occurring because some biological stimulus reinforces it. Bulimics often describe binge eating as a sedative-like high, many times not recalling what they have eaten during the binge (Pyle, Halvorson, & Goff, 1986). Also, a psychological reinforcement may perpetuate the binge, perhaps by eliminating feelings of anxiety, loneliness, or depression. The relief of dysphoric symptoms through bingeing provides a strong negative reinforcement. While behavioral theory is not well suited to explaining the causes of eating disorders, it has proven helpful in the treatment of the maladaptive behavior.

Sociocultural theories emphasize the pressure to be thin felt by women in our culture. Reviews of popular women's magazines have indicated an increasing number of diet articles and a decrease in the weight of female models in recent years (Garner, Garfinkel, & Schwartz, 1980).

Biological theories currently espoused for eating disorders center on hypothalamic abnormalities and on similarities between eating disorders and major affective disorders (bipolar disorder or major

depression). Pope and Hudson (1984) are two of the leading proponents in believing that there is a strong correlation between bulimia and the affective disorders. They have found that 80% of bulimic patients have had a major affective disorder in their lifetime. Bulimia is not believed to be the cause of the depression as nearly half of these patients experienced the onset of their depressive symptoms more than a year before the bulimia started. There seems to be some underlying biological abnormality which is similar for both bulimia and the major affective disorders. Findings that bulimics often respond positively to antidepressant medications has provided further support for a similar biological basis for bulimia and depression.

Despite the numerous theoretical approaches to eating disorders, the bulk of the evidence suggests that anorexia and bulimia are multidetermined (Baird & Sights, 1986). They seem to be a result of an interaction of psychological, physiological, developmental, and cultural forces (Garfinkel & Garner, 1982). This study will focus primarily on the psychological and cultural influences on eating disorders.

Psychosocial Factors in Eating Disorders

Both bulimic and anorexic individuals seem to feel dissatisfied with life and with themselves. This dissatisfaction, combined with perfectionistic tendencies is suggested to generate a need for controlling some aspect of life. Because the individual cannot completely control other people, she shifts her focus to an area she can control, her own weight (Slade & Dewey, 1986).

In comparison to a community sample, bulimic patients in one study were reported to have more impaired life adjustments in several areas, including work, social and leisure activities, family life, marital adjustment, and overall adjustment (Johnson & Berndt, 1983). Repeatedly in the literature, bulimics are reported to have difficulty with interpersonal relationships. In Pyle's study (Pyle et al., 1981), most of the bulimic individuals reported interpersonal problems. Bulimics in Johnson and Larson's (1982) sample spent much more time alone and involved with food than the normal population. They reported that food had become their closest companion. Many bulimics identify problems with interpersonal relationships as the catalyst for their bingeing.

Poor relationships were identified as one of the underlying factors contributing to bulimic activity, according to a recent article by Lacey et al. (1986). Bulimic patients described poor relationships with parents and peer groups as contributing to their bingeing. Binge eating was described as being used for its sedative qualities or as a stimulant to replace loneliness.

Some of the interpersonal difficulties experienced by women with eating disorders may stem from the difficulty they have in integrating "masculine" ideals such as independence and assertiveness with traditional concepts of femininity. They are caught in a dilemma as they compete for "masculine" goals, which produces anxiety about being "unfeminine" (Dunn & Ondercin, 1981).

Such deficits in autonomy and assertiveness are suggested by numerous authors as contributing to the development of eating disorders (Neuman & Halvorson, 1983). Bulimics tend to be more passive than normal controls, according to Johnson and Larson (1982). Even for female college students who did not meet all the criteria for a diagnosis of bulimia, severity of

binge eating was negatively correlated with assertiveness (Hawkins & Clement, 1980).

In one study exploring the relationship between assertiveness and binge eating, Greenberg (1986) used the College Self Expression Scale (CSES) to measure assertiveness. She found no significant difference in assertiveness between bulimic and non-bulimic college students. The CSES is a 50 item inventory which is intended to assess both positive and negative assertiveness (Galassi, Delo, Galassi, & Bastien, 1974). McCanne (1985) also used the CSES, comparing bulimic college students with normals and with individuals in psychotherapy for problems other than eating disorders. The bulimic individuals scored lower in assertiveness than the other two groups. McCanne cites this as the first published evidence documenting differences in assertiveness.

Another measure of assertiveness, the Rathus Assertiveness Schedule (RAS), was used to assess social performance skills in a study of the impact of stress on bulimic college students (Shatford & Evans, 1986). The RAS is a 30 item scale intended to measure assertiveness (Rathus, 1973). Lack of assertiveness was one psychological status variable implicated in

the stress process leading to bulimia. However, Shatford and Evans concluded that psychological status variables such as assertiveness have only an indirect role in the expression of bulimia.

One difficulty with the studies using the CSES and RAS are their choice of instruments, as both fail to distinguish between assertiveness and aggressiveness. In fact, some of the RAS questions equate assertive behavior with aggressive behavior. Because many individuals with eating disorders struggle with internal feelings of aggression, such as anger and hostility, which they are unable to constructively express outwardly, it is important for studies to differentiate assertive behavior from aggressive behavior. This is of particular importance if training in assertiveness is a part of treatment, as the training may in fact result in an increase in aggressive behavior rather than in the desired assertive behavior. As Lazarus (1973) states: "There is little to be gained, (and perhaps much to be lost) from the acquisition of abrasive and obnoxious interpersonal behaviors in the guise of 'assertive training'" (p. 698).

In a psychosocial area related to assertiveness, one study surveyed female medical students to assess the degree of social maladjustment among those with eating disorders (Herzog, Pepose, Norman & Rigotti, 1985). Their findings revealed that those students with current or previous eating disorders reported greater social maladjustment than non-eating disordered students.

Segal and Figley (1985) explored shyness, another factor involved in the interpersonal relationships of bulimics, using a sample of female undergraduates. They found that bulimics scored higher on private shyness on the Fear of Negative Evaluation Scale than normal eaters.

The studies cited indicate that, while there is some empirical evidence of a lack of assertiveness and difficulty with interpersonal relationships among those with eating disorders, there is still a paucity of data. A need exists for further empirical documentation of the lack of assertiveness of clients with eating disorders. Although therapists working with eating disordered clients often utilize assertiveness training, there is little empirical evidence indicating that anorexics and bulimics lack

skills in asserting themselves. The studies that do demonstrate deficiencies in assertiveness fail to delineate among types of assertive responses and fail to distinguish desired assertive responses from undesired aggressive behavior. An additional limitation to prior studies is that most have been limited to college campuses or clinics affiliated with a university.

A broader look at the eating disordered patients' interpersonal relationship skills, such as managing anger and handling conflict, would be valuable. One of the purposes of this study is to investigate whether women with eating disorders score lower on a measure of assertiveness than a non-clinical population of women. The instrument to be used, the Interpersonal Behavior Survey (IBS) provides several measures of assertiveness as well as measures of aggressiveness and relationship skills. A clinical population will be studied, rather than college or university students, in an attempt to expand upon our knowledge of eating disorders.

Assertiveness

An Historical Overview

The concept of assertiveness was initially developed by Salter as early as 1949. Although he did not use the term "assertive behavior," Salter wrote about excitatory and inhibitory personalities. Salter (1949) proposed six modes of behavior for assertive training: (a) feeling talk (deliberate use of spontaneous emotions), (b) facial talk (display of emotion in face and movements), (c) contradict and attack (when in disagreement with another, (d) use of "I," (e) express agreement when praised, and (f) improvisation (spontaneous responses).

Joseph Wolpe, who developed assertiveness as a formal concept in 1958, referred to Salter as the pioneer of assertive behavior. Wolpe (1958) justified training in assertiveness by demonstrating how assertiveness training (AT) could help to alleviate the "anxiety and helplessness" that accompany non-assertive behavior. Because an assertive response was seen as incompatible with anxiety, Wolpe believed this undesired emotional state could be eliminated through the counterconditioning of AT. As initially proposed by Wolpe, the term assertiveness was used in place of

the term "excitation" in deconditioning unadaptive anxiety responses. Other emotions were believed to involve bodily events that were competitive with anxiety. By 1973 Wolpe had defined assertive behavior as "the proper expression of any emotion other than anxiety towards another person" (p. 80-81).

While many current AT techniques are based on Wolpe and Salter's early writings, new definitions and approaches to assertiveness have also developed. Rimm and Masters (1974) view assertive behavior as "straightforward and honest" communication, involving emotional states. Their definition of AT is "any therapeutic procedure aimed at increasing the client's ability to engage in such behavior in a socially appropriate manner" (p. 81). Behavioral goals usually include the expression of negative feelings such as anger and resentment, but often assertive procedures are employed to facilitate the expression of positive feelings such as affection and praise.

Rimm and Masters' later writings (1979) provided evidence that assertiveness had two major benefits for clients: an increased sense of well-being and the capacity to obtain more significant social rewards and more satisfaction from life.

Wolpe, and later, Lazarus (1966) suggested that people have certain "rights" which AT helps them to exercise. When Alberti and Emmons (1970) published their book Your Perfect Right, which popularized assertiveness, they also emphasized that assertiveness is a right, placing an ethical or moral emphasis on assertiveness. In fact, their book contains in an appendix the Universal Declaration of Human Rights of the United Nations General Assembly.

Whether or not assertive behavior is a right has been an issue of debate among many authors who are concerned about the ethical and moral issues involved in assertiveness. Jakubowski and Lange (1978) helped in clarifying some of the confusion about assertiveness by defining the assertive person as one who is able to appropriately express personal preferences, feelings, and opinions, but is also able to respect the preferences, feelings and opinions of others. Assertiveness, therefore, is not synonymous with selfishness, but is similar to interpersonal honesty.

Assertiveness training, and similar approaches to increasing self-effectiveness, has been gaining in popularity since the publication of Alberti and

Emmons' book in 1970. Special groups, such as nurses (Clark, 1978; Chenevert, 1978), women (Bloom, Coburn & Pearlman, 1975; Butler, 1976), Blacks (Cheek, 1976), parents (Merkel, 1979), and managers (Taetzsch & Benson, 1978) have been the focus of training in assertive behavior.

Assertiveness: A Revised Definition

There has been dispute about the distinction between assertion and aggression from the origin of the terms in behavioral psychology. Wolpe (1958) initially defined assertiveness as including "not only more or less aggressive behavior, but also the outward expression of friendly, affectionate and other nonanxious feelings" (p. 114). Albert Ellis suggested that assertion is one form of aggression, perhaps the healthiest form (cited in Dawley & Wennrich, 1976).

Galassi and Galassi (1978) identified the confusion between aggression and assertion, as well as the lack of a clear definition of assertion. DeGiovanni and Epstein (1978) claimed that neither clinical nor research literature distinguishes between assertion and aggression.

More recent definitions and empirical findings, however, have supported a distinction between

aggression and assertion. In an effort to distinguish assertive behaviors from aggressive behaviors, Mauger and Adkinson (1980) developed the Interpersonal Behavior Survey (IBS).

Mauger and Adkinson (1980) define assertiveness as follows:

> Assertiveness has been conceptualized as behavior directed toward reaching some desired goal which continues in the direction of that goal in spite of obstacles in the environment or the opposition of others. The attitude of the assertive person is positive toward other people. If others do attempt to block the attainment of a goal, the assertive person's actions are solely aimed at eliminating the interference and not at attacking the offending individual. (p. 1)

Aggressive behavior, in contrast to assertiveness, is described as originating from:

> attitudes and feelings of hostility toward others. The purpose of aggressive behavior is to attack other individuals or to exert power over them. . . . Aggressive people may deliberately

> wish to violate the rights of others, or may simply disregard the rights of others in pursuing their own goals. (p. 1)

The IBS has demonstrated that there is a clear distinction between assertion and aggression at both an item level and a correlational level. There is no item overlap between any assertiveness scale and aggressiveness scale on the IBS. This instrument, which was used as the measure of assertiveness in this study, is further explained in Chapter 2.

Assertiveness and Spirituality

The growing interest in assertiveness has received attention from those interested in spiritual health as well as psychological health, including the evangelical Christian community. Several individuals have promoted assertiveness by advocating that Christians may benefit through application of AT techniques. McAllister (1975) suggested that AT could be easily synthesized into the practice of the Christian therapist, helping clients to relieve anxiety and function more meaningfully in interpersonal contacts and relationships.

Scanzoni (1976) suggested the application of AT for Christian women, advocating that such training

would aid them in displaying the "holy boldness" of the Puritan devotional writers. He stated that to be assertive is to determine "what one should or must do because it is right in the sight of God and because it is fair and just to oneself and to others and then to act on those convictions" (p. 16). Scanzoni views the Christian woman's lack of assertiveness as due to a confusion between acquiescence or passivity and submissiveness. This passivity results in a failure to pursue God's will diligently. The helpfulness of assertiveness can be extended beyond women to include all Christians, as Christians often mistakenly view being non-assertive as a part of Christianity (McAllister, 1975).

Several individuals have promoted assertiveness in the Christian community through Biblical support, citing Jesus and other Biblical personages as being characterized by assertiveness (Swenson, Brady & Edwards, 1978; Cerling, 1980). McAllister (1975) cites examples in the book of Mark which meet Salter's previously mentioned six modes of assertive behavior. Stoudenmire (1978) notes Jesus' use of assertive behavior, using not only Salter's early criteria, but later authors' frameworks. He illustrates how Jesus

demonstrated many of Smith's (1975) seven assertive skills of: (a) broken record, (b) fogging, (c) free information, (d) self-disclosure, (e) negative assertion, (f) negative inquiry, and (g) workable compromise. Stoudenmire also reports that Lazarus' (1973) four components of assertiveness were shown by Jesus. These include the ability to: (a) say no to unreasonable requests or demands; (b) make requests or ask for help from others; (c) express both positive and negative feelings; and (d) initiate, continue, and terminate general conversations.

Swenson et al. (1978) conducted the first empirical study of assertiveness with a Christian population. Using students at a Christian college, they sought to explore the effect of pretraining (with either a Biblical or secular basis) on the attitude and behavior of participants in AT groups. Biblically-based pretraining was shown to produce decreased acceptance of nonassertive behavior, resulting in a more favorable attitude toward AT. Providing a spiritual or Biblical support basis for assertiveness appears to be a vital element in training individuals with strong religious convictions.

Mauger, Simpson and Adkinson (1979) found some relationships between assertiveness and Christian belief in a study of a student population. Christian groups were less aggressive, although not less assertive than non-religious students. However, fundamentalist students scored lower than a non-religious group on several assertiveness scales. This finding was noted as suggesting that assertiveness training may be threatening to fundamentalists. It also provides further evidence of the need to distinguish between assertive and aggressive behavior.

The first book linking assertiveness and religion, Anger and Assertiveness in Pastoral Care, was published in 1979, authored by David Augsberger. He suggested ways pastors could manage their anger and aggression constructively and encouraged them to aid their church members in doing likewise. Augsberger's concern was primarily with application of assertive techniques to a religious setting; he did not raise questions about potential conflicts between Christianity and assertiveness.

The Christian community, however, is not wholeheartedly in support of assertiveness training

for its members. Irwin (1978), for example, views Scripture as containing teachings that are not in agreement with the concept of assertiveness. One of his objections to assertiveness training with Christians is its foundation in behavioristic psychology, which he views as incompatible with the Bible. His view of behaviorism seems, however, to be overly simplistic and inaccurate. Bufford's (1981b) explanation of behaviorism provides a more well-balanced understanding with which to counter this objection to assertiveness for Christians. Another objection by Irwin is based on the lack of a clear definition of assertive behavior, with a confusion between assertion and aggression. Assertiveness as distinct from aggression has been discussed previously in this paper.

Although he affirms the use of assertiveness, Bufford (1981a) raises the question of the potential of assertiveness to result in selfishness, which is antithetical to the teaching of the Bible. His conclusion regarding assertiveness is that the Christian should place others first while considering himself.

In summarizing the views of various authors toward the integration of principles of assertiveness with Christian values, Otto (1983) has categorized three groups: (a) Those who see no conflict between assertiveness and Christianity (McAllister, 1975; Moy, 1980; Scanzoni, 1976; Stoudenmire, 1978) or see the conflict as only a superficial problem (Sanders, 1980); (b) those who accept assertiveness and translate it into Christian language. He divides this group into the popularizers (Augsberger, 1979; Cerling, 1980; Emmons & Richardson, 1981; Faul & Augsberger, 1980) and the researchers (Sanders, 1980; Swenson, et al., 1978); (c) those who see a significant difference between Christianity and assertiveness (Bufford, 1981a; Irwin, 1978).

Jones (1984) suggests a refreshingly new approach to the integration of AT with Christian values. Rather than looking only at whether assertiveness is a Christian value or goal, he advocates that both treatment and research methods should also be impacted by one's Christian beliefs. He renames AT "Christian Response Training" and suggests that Scripture supports such training as belief change and response enablement. The therapist can "function

as an external stimulus, guiding the client in the exploration of his or her ethical beliefs" (p. 96). He claims that "Scriptures lend credence to the utility of a directive, educative approach to behavior change like that of assertiveness training" (p. 97). Emphasis in training Christians in assertive responses needs to be not only on competency, but on righteousness.

In a review of assertiveness and theological concepts, Sanders and Maloney (1982) have concluded that assertiveness and Christian values are more consonant than they are dissonant.

In summary, assertiveness has been demonstrated to be a desirable characteristic, which fosters and is an indicator of psychological health. Some difference of opinion exists about the value of assertive skills in the life of a Christian and the possible impact of assertiveness training on one's spirituality. The applicability and appropriateness of training in assertiveness for Christians has been more widely accepted recently. Reviews of the lives of biblical characters who demonstrated assertive behavior as well as critiques of assertiveness from a theological basis

have suggested that AT is not only appropriate for Christians, but it may enable them to be more effective in living righteously.

There is only limited research on the relationship between psychological health, as indicated by such factors as assertiveness, and spiritual health. One purpose of this study is to investigate the levels of assertiveness and aggressiveness, as one indicator of psychological health in eating disordered patients. A second purpose is to explore the relationship between assertiveness and spiritual health within this sample. This clinical group will be compared with a group assumed to be more psychologically healthy.

Spiritual Well-Being

Until recently the area of human spirituality has been essentially ignored by social and behavioral scientists (Ellison, 1983). Historically, spirituality seems to have been mentioned in psychological research only in regard to psychopathology. The dearth of research relating spirituality and psychological health is particularly surprising considering that 94% of Americans report

that they believe in God and 84% state that their religious beliefs are fairly or very important (Gallup, 1980, p. 20). In fact, interest in spirituality appears to be increasing in America. A Gallup Poll of the adult population in 1983 found that 57% reported being more interested in religious and spiritual issues than five years earlier, 56% considered themselves more reliant on God, and 44% claimed their spiritual well-being had improved ("Trends," 1983).

For many Americans religion and belief in God affects not only their cognitions, but also their behavior, specifically in relationship to other people. Gallup's (1980) poll indicated that 65% of Americans maintain that their religious beliefs affect their daily thinking or acting "a great deal" or "some."

In the last few years a renewed interest in empirical investigation of spiritual issues has developed among behavioral scientists. A new group of scientists has emerged who "have begun to probe the domain of the spiritual, believing that it may be as susceptible to scientific research as many other intangible concepts in their disciplines" (Moberg,

sociologist, who states that "there is a great need for research on and related to spiritual well-being in the context of both the 'pure' and 'applied' aspects of numerous academic disciplines" (Moberg, 1978).

A major difficulty involved in studying a concept such as spirituality lies in the problem of defining and operationalizing the term "spiritual." One aspect of spirituality that has been researched by Ellison (1983), is the concept of spiritual well-being. Ellison claims that all individuals have a need for transcendence if they are to experience a sense of well-being in life. Transcendence is "the sense of well-being we experience when we find purposes to commit ourselves to which involve ultimate meaning for life" (Ellison, 1983, p. 330). The need for transcendence was suggested as an addition to the three basic needs required by individuals for a sense of well-being which Campbell identified: the need for having, the need for relating, and the need for being or self-actualization (Campbell, 1981; Campbell et al., 1976).

Ellison's definition of the construct of spiritual well-being is based on the earlier work of Moberg and Brusek (1978). Spiritual well-being is

Moberg and Brusek (1978). Spiritual well-being is seen as two-faceted, involving a vertical dimension regarding one's relationship to God and a horizontal dimension regarding life's purpose apart from any religious reference (Paloutzian & Ellison, 1982).

Ellison (1983) helped in clarifying the concept of spiritual well-being with three assumptions. First, he views spiritual well-being as different from spiritual health. Spiritual well-being is an expression of spiritual health, an indicator of its presence. Second, he suggests that "spiritual well-being also does not appear to be the same as spiritual maturity" (p. 332). An individual may subjectively experience a sense of spiritual well-being, when in fact he is quite immature spiritually. Conversely, he might be very spiritually mature, but subjectively feel a lack of well-being in the spiritual realm of life. Third, "spiritual well-being should be seen as a continuous variable, rather than as dichotomous" (p. 332). Whether one has spiritual well-being is not so much the question as how much does he have and how can he enhance it.

Spiritual well-being, then, has been developed as an indicator of the concept of spiritual health. It

is an assessment of one's current spiritual status, which may be analogous to one's psychological or physical health. Just as psychological and physical health are often measured by various tests, so might spiritual health be subjected to assessment. Several instruments have been developed in an attempt to operationalize or measure the concept of spiritual health.

The most widely used instrument for measuring spiritual well-being is an attitude scale developed by Ellison and Paloutzian (1978). This scale attempts to provide a general measure of spiritual well-being that is not hindered by "specific theological issues or a priori standards of well-being which may vary from one religious belief system or denomination to another" (Ellison, 1983, p. 332).

The Spiritual Well-Being Scale contains 20 items, ten measuring the vertical dimension, religious well-being (RWB), and ten measuring the horizontal component, existential well-being (EWB). The two subscales combined yield an overall measure of spiritual well-being (SWB). Factor analysis revealed two factors: a single factor which comprised the Religious Well-Being subscale and two sub-factors

comprising the existential items. One sub-factor measured life direction and the other was related to life satisfaction. These subfactors loaded together on the Existential Well-Being subscale (Ellison, 1983). Reliability has been demonstrated by test retest coefficients at .93 for SWB, .96 for RWB and .86 for EWB. Internal consistency was reported by coefficient alphas of .89 for SWB, .87 for RWB, and .78 for SWB (Paloutzian & Ellison, 1982).

In validation studies, the Spiritual Well-Being Scale has been found to relate positively to self-esteem, purpose in life, family togetherness in childhood, relationship with parents, peer relationships as a child, and perceived social competence. A negative relationship was found with value orientations of personal freedom, individualism, and success (Campise et al., 1979). SWB was found to be negatively correlated with loneliness (Ellison & Cole, 1982), and living in a large city for women (Paloutzian & Ellison, 1982).

Paloutzian and Ellison have demonstrated that the SWB correlates negatively with the UCLA Loneliness Scale (Paloutzian & Ellison 1979a, 1979b; Ellison & Paloutzian, 1978). Russell, Peplau, and Ferguson

(1978) also report a negative correlation between the UCLA Loneliness Scale and the SWB scales. EWB also correlated negatively with a sense of rejection. There was a positive correlation between scores on the SWB scale and scores on the Purpose in Life Test (Crumbaugh & Maholick, 1969; Paloutzian & Ellison, 1979a; Ellison & Paloutzian, 1979).

Correlations of SWB scores with various religious variables have been found, including: spiritual maturity, frequency of church attendance, importance of religion, frequency of family devotions, frequency and duration of devotions, religious knowledge, and the intrinsic scale of Allport and Ross' (1967) Religious Orientation Scale (Bufford, 1984). SWB and extrinsic orientation were negatively correlated.

Ellison and Economos (1981) found the SWB and its subscales to be positively related with doctrinal beliefs affirming the value of the individual; worship orientation and devotional practices which promote a sense of personal acceptance and communion with God; doctrinal emphasis of individual gifts, the unconditional love of God, and being valued as a person by God; one's own positive self-evaluation in

God's acceptance; number of Sunday services attended each month; and average amount of time in daily devotions.

Two studies have used the SWB in investigating the relationship between religiosity and psychopathology, as measured by the MMPI. Frantz (1985) found no significant relationship between psychopathology and spiritual well-being among psychological outpatients. Mueller (1986), using a sample of male seminary students found no positive correlations between religiosity, as measured by the SWB and other scales, and psychopathology.

Spiritual well-being was found to be positively related to marital satisfaction, as measured by the Marital Satisfaction Inventory, in a study by Quinn (1983). However, there was no significant relationship between the RWB subscale and marital satisfaction.

Three studies of medical populations provide further information about spiritual well-being. Hawkins (1986) reported that for medical outpatients SWB was positively correlated with assertiveness, as

measured by the Interpersonal Behavior Survey. However, SWB was negatively correlated with aggression and with high blood pressure.

Campbell (1983), in a study of patients with renal failure who were undergoing hemodialysis, found a positive correlation between spiritual well-being scores and the adjustment of the patients. There were also significant positive correlations between spiritual well-being and measures of assertiveness, religious coping, and acceptance of the disability.

In a sample of chronic pain patients spiritual well-being and assertiveness contributed to predicting treatment outcome (Mullins, 1986). SWB correlated positively with four of the eight assertiveness scales on the IBS: General Assertiveness, Self-Confidence, Praise, and Requesting Help.

Among a group of 90 seminary students SWB was found to be positively correlated with five of the eight assertiveness scales on the IBS (Bufford & Parker, 1985). These scales were the General Assertiveness, Self-Confidence, Initiating Assertiveness, Praise, and Requesting Help.

Moberg (1985) has proposed that significant subject areas for study in the the area of spiritual

well-being include its relationship with mental wellness, life adjustment, and ability to work with other people. However, only one study has been conducted to date utilizing the SWB with a psychiatric population. Agnor (1986) found that non-religious sociopathic males scored low in spiritual well-being. There exists a need for further exploration of the spiritual well-being of those who are not experiencing "mental wellness."

Objectives of Study

The study of the relationship between assertiveness and spiritual well-being in eating-disordered individuals has been shown to be an area needing further research. To date, little empirical evidence has been provided to support the theoretical assumptions and clinical observations that individuals with eating disorders are deficient in interpersonal skills such as assertiveness. Studies in the area of spiritual well-being are lacking among clinical populations. This study will examine the relationship between assertiveness and spiritual well-being among eating disordered clients. This will be done through a comparison of women with eating

disorders with a similar group of non-eating disordered female medical clinic outpatients. The eating disordered participants will be composed of two groups: inpatients and outpatients.

Hypotheses And Research Questions

The following hypotheses will be tested in this study:

H_1: There will be no significant difference among the eating disorder groups and the medical outpatient group in assertiveness as measured by the assertiveness subscales of the IBS.

H_2: There will be no significant difference among the eating disorder groups and the medical outpatient group in aggression as measured by the aggressiveness subscales of the IBS.

H_3: There will be no significant difference among the eating disorder groups and the medical outpatient group in scores on the relationship scales of the IBS.

H_4: There will be no significant difference among the eating disorder groups and the medical outpatient group in existential well-being, as measured by the EWB subscale of the Spiritual Well-Being Scale.

H_5: There will be no significant difference among the eating disorder groups and the medical outpatient group in religious well-being, as measured by the RWB subscale of the Spiritual Well-Being Scale.

H_6: There will be no significant difference among the eating disorder groups and the medical outpatient group in spiritual well-being, as measured by the SWB subscale of the Spiritual Well-Being Scale.

H_7: Assertive behavior as measured by the Interpersonal Behavior Survey SGR Scale will be positively correlated with spiritual well-being for individuals with eating disorders. The rationale for this positive correlation is based upon the earlier findings of Campbell (1983), Bufford and Parker (1985), Hawkins (1986), and Mullins (1986).

In addition to these hypotheses, three research questions will be examined:

1. What influence might particular demographic variables have on measures of assertive behavior and spiritual well-being for those with eating disorders? Variables include: age, marital status, education, frequency of church attendance, and family income.

2. What influence do demographic variables have on group membership of the samples studied?

3. Do inpatients and outpatients with eating disorders differ in interpersonal behavior traits and spiritual well-being?

Conclusion

The study of eating disorders, particularly bulimia, is a relatively new field, with a need for further research. Additional empirical information is needed regarding the psychosocial factors involved in the development and maintenance of eating disorders. One specific psychosocial factor which is often implicated in theories, but only minimally studied to date, is the interpersonal behavior of assertiveness.

This chapter presented an historical overview of research on assertiveness, focusing on the distinction between assertive and aggressive responses. The question of the appropriateness of assertive behavior for Christians was explored. The need was demonstrated for research to support the theoretical views and clinical observations of a lack of assertiveness among eating disordered individuals.

The spiritual well-being of psychiatric populations is an area that has been investigated only minimally by behavioral scientists. No studies have

explored the spiritual well-being of individuals with eating disorders and the potential relationship between spirituality and interpersonal behavior traits in this group. This study will have the twofold purpose of contributing to a better understanding of the psychosocial factors involved in eating disorders as well as exploring the potential relationship of spiritual well-being and interpersonal behavior traits in this clinical group.

CHAPTER 2

METHODS

Introduction

This chapter will detail the method used in this study of a comparison of the interpersonal behavior traits and spiritual well-being of eating disorder clients and medical clinic outpatients. The chapter consists of three parts: (a) a demographic description of the subjects, (b) explanation of the instruments used, and (c) the procedure used to gather and analyze the data.

Subjects

Participants for this study were drawn from two medical settings. The eating disorder participants were patients in the inpatient or outpatient eating disorders units of Portland Adventist Medical Center in Portland, Oregon. Information from a total of 66 female participants was used for this study.

Assignment to the inpatient or outpatient program was decided at the time of the individual's

intake interview. Diagnosis of bulimia or anorexia was confirmed by a psychiatrist on the hospital staff. Program criteria for inpatient participation includes: (a) actual or potential danger to self, (b) failure of outpatient or residential treatment program as evidenced by intensification of symptoms which warrant medical regulation or lack of expected therapeutic response and/or inadequate involvement of the patient as an active participant in the program.

Eating disorder outpatient program criteria includes: (a) engaging in bingeing behavior but not demonstrating medical complications needing intervention; (b) some dysfunctioning in obsessive thoughts of food, depressed mood, and/or feelings of hopelessness, though there is no significant interference with familial, vocational, educational or other age-appropriate social role functions, and not significantly impaired to the point of needing supervision; (c) ability to be committed to treatment; (d) requires less professional attention; and, (e) already involved in inpatient and/or residential program and ongoing follow-up therapy is deemed necessary.

Participants for the medical outpatient group were drawn from a private medical clinic in Portland, Oregon. This clinic is located in close geographical proximity to both the inpatient and outpatient eating disorders units. This data was collected as part of a larger study by Hawkins (1986). A total of 88 outpatients were sampled, with selection done on a randomly chosen day of the week. Participants for this study were limited to females between the ages of 18-60, yielding a total of 61 women.

Instruments

This section will be divided into the following parts: (a) a description of the background information questionnaires, (b) the Interpersonal Behavior Survey, and (c) the Spiritual Well-Being Scale.

Background Information Questionnaires

These two forms included such information as age, sex, marital status, education, income, and frequency of church attendance. Other data, which was not

utilized in this study, was collected for the purposes of other studies. See Appendices B and D for the two questionnaires utilized.

Interpersonal Behavior Survey

This instrument was developed by Mauger and Adkinson (1980) to measure several aspects of interpersonal behavior. It includes 272 items intended to distinguish between assertive behaviors and aggressive behaviors. The authors of the Interpersonal Behavior Survey (IBS) define assertiveness as "behavior directed toward reaching some desired goal which continues in the direction of that goal in spite of obstacles in the environment or the obstacles of others" (p. 1). Aggressiveness is defined as "behavior that originates from attitudes and feelings of hostility toward others. The purpose of aggressive behavior is to attack other individuals or to exert power over them in some fashion" (Mauger & Adkinson, 1980, p. 1). The items are responded to on a true/false basis. The 21 individual scales fall under four categories: validity scales, aggressiveness scales, assertiveness scales and

relationship scales The following descriptions of scales are taken from the Interpersonal Behavior Survey Manual (Mauger & Adkinson, 1980).

Validity Scales

There are three validity scales, which reflect the test-taking attitude of the individual. The Denial scale (DE) "indicates a hesitancy to admit to common but socially undesirable weaknesses and feelings." The Infrequency scale (IF) indicates a "tendency to endorse items that less than 10% of the normative sample endorsed." The Impression Management scale (IM) measures "the degree to which impression management plays a part in a person's responses to IBS items." This would involve a tendency to describe oneself in a socially desirable manner (p. 2).

Aggressiveness Scales

There are seven aggressiveness subscales. The General Aggressiveness, Rational scale (GGR) measures the "general response class of aggressiveness over a wide variety of item content including aggressive behaviors, feelings, and attitudes." The Hostile Stance (HS) scale "measures an antagonistic orientation toward other people, a view of the world that justifies aggression in order to get ahead in

life or to protect oneself." The Expression of Anger (EA) scale "is an indication of the tendency to lose one's temper and express one's anger in a direct, forceful manner." The Disregard for Rights scale (DR) measures "the tendency to ignore the rights of others in order to protect oneself or to gain an advantage." The Verbal Aggressiveness scale (VE) "gives an indication of the using of words as weapons by doing such things as making fun of others, criticizing, and putting others down." The Physical Aggressiveness scale (PH) "reflects the tendency to use or fantasize using physical force." The Passive Aggressiveness scale (PA) "samples behavior that indicates indirect or passive expression of aggressiveness." These include such behaviors as stubbornness, negativism, procrastination, and complaining (p. 4).

Assertiveness Scales

The assertiveness measures of the IBS consist of eight subscales. The General Assertiveness, Rational scale (SGR) "is a general measure of assertiveness." The Self-Confidence scale (SC) "measures the expression of positive attitudes about one's self and the expression of self-assurance." The Initiating Assertiveness scale (IA) is "an indication of

leadership potential and the tendency to take an ascendent role in groups." The Defending Assertiveness scale (DA) "reflects behaviors related to standing up for one's rights." The Frankness scale (FR) samples the "willingness to clearly communicate one's true feelings." The Praise scale (PR) reflects "one's degree of comfort in giving and receiving praise." The Requesting Help scale (RE) measures the "willingness to ask for reasonable favors and help when they are legitimately needed." The Refusing Demands scale (RF) indicates the "willingness to say `no' to unreasonable or inconvenient demands from others" (p. 4-5).

Relationship Scales

Three subscales measuring "relationship" factors are included in the IBS. The Conflict Avoidance scale (CA) measures the tendency to "evade open disagreement or conflict with others." The Dependency scale (DP) indicates the "degree to which a person is dependent upon others" to meet emotional needs. The Shyness scale (SH) samples "social behaviors such as friendliness, participation in social events, and the enjoyment of social interaction" (p. 5).

Reliability and Validity

The norm group for the IBS consisted of 400 female and 400 male community residents in the southern part of the United States. The raw scores for the test are converted to T-score equivalents, based on the norm group. The reliability characteristics of the IBS have been demonstrated by using a test-retest format over both a two-day and ten-week period and by the coefficient alpha internal consistency procedure. The modal test-retest reliability was demonstrated to be greater than .90 (Mauger & Adkinson, 1980).

Validation studies have indicated that the assertiveness scales and those measuring aggressiveness form distinct response classes. There are no overlapping items on the two scales. Correlations between the Aggressiveness and Assertiveness scales are in the predicted low to zero range. Convergent and discriminant validity of the IBS has been demonstrated by correlations with several well-known measures of personality, such as the MMPI and the Edwards Personal Preference Schedule (Mauger & Adkinson, 1980).

Spiritual Well-Being Scale

This 20 item self-report questionnaire was developed by Paloutzian and Ellison (1979a, 1979b). Ten items comprise a religious well-being (RWB) scale, the perceived "health" of one's relationship with God. The other 10 items assess one's existential well-being (EWB), reported life satisfaction and purpose in life. Together the RWB and EWB constitute the measure of Spiritual Well-Being (SWB; see Appendix E).

The SWB answers are in a modified Likert format with a six point scale ranging from strongly agree to strongly disagree. There is no midpoint in order to discourage neutral responses. Half of the items are negatively worded in order to avoid a response set. The items on the scale are scored from 1 to 6, with the higher number indicating greater well-being; negatively worded items are scored in a reversed direction.

The Spiritual Well-Being Scale (SWB) is summarized in Ellison (1983). He holds three basic assumptions: (a) "Spiritual well-being may not be the same thing as spiritual health." It is an expression of spiritual health, an indicator of its presence. (b) "Spiritual well-being also does not appear to be

the same as spiritual maturity." (c) "Spiritual well-being should be seen as a continuous variable, rather than as dichotomous" (p. 332).

According to Ellison (1983), the reliability of the SWB scale is reported to be good. Internal consistency was demonstrated by split-half reliabilities of .89 (SWB), .87 (RWB), and .78 (EWB). The correlation between RWB and EWB subscales is .32, significant at the .001 level. Paloutzian and Ellison (1982) reported the test-retest reliability coefficients from 100 student volunteers at the University of Idaho as .93 (SWB), .96 (RWB), and .86 (EWB).

The face validity of the SWB scale is suggested by examination of the item content. The concurrent and construct validity of the SWB has been demonstrated through factor analysis of items and predicted correlations with other theoretically related scales. In a factor analysis of the SWB items, there were shown to be two factors with eigenvalues greater than 1.0. All of the items with reference to God loaded on the RWB factor. The

existential items loaded on two sub-factors, "one connoting life direction and one related to life satisfaction" (Ellison, 1983, p. 333).

Procedure

Eating Disorder Patients

Upon admission to either the inpatient or outpatient eating disorders units of Portland Adventist Medical Center, patients were invited to participate in this research study. Participation in the study was on a voluntary basis. All new admissions to the units during a 12 month period were asked to complete a background information sheet and two personal assessment inventories. They also were provided with and signed a consent form which informed them about their requirements and rights as participants. A copy of this form is available in Appendix A.

Only data from female patients was used for this study. Participants included those with a DSM III diagnosis of either anorexia nervosa or bulimia. Information was collected from 66 females from May 1985 through April 1986. During the one year

period for collection of data a total of 80 inpatients and 190 outpatients were admitted to the unit. The sample for this study comprises 49% of the inpatients and 15% of the outpatients, or an overall rate of 24% of all the eating disorder patients.

Medical Clinic Patients

Office personnel approached patients who had come to the medical clinic for an office visit and briefly described the project, asking patients if they would be willing to review the consent form which described the research study. Those who were willing to participate signed the consent form (see Appendix C) and were given the Background Information Questionnaire (see Appendix D), the Interpersonal Behavior Survey, and the Spiritual Well-Being Scale (see Appendix E). A notation was made specifying the reason for refusal for those who were not willing to participate. Most patients completed part of the assessment material while waiting to see their physician and returned the remainder of the material later in an envelope provided for them.

Chapter Summary

Chapter Two presented information relevant to the data collection of the research. Subjects were drawn from two separate groups: those with diagnosed eating disorders and a comparison group of medical clinic outpatients. The eating disorder subjects consisted of 66 women, including 39 inpatients and 27 outpatients in the Eating Disorder Program of Portland Adventist Medical Center. The medical clinic sample included 61 women. Each patient completed the IBS, SWB, and a demographic questionnaire.

CHAPTER 3

RESULTS

Introduction

This chapter presents the results in seven sections. The first section identifies the methods for data analysis. The second discusses missing data. The third section presents the descriptive demographic information for the three groups. The IBS and SWB data is cited in the fourth section. The fifth section provides the results of the hypotheses. The sixth section reviews the research questions. The chapter is summarized in the seventh section.

Data Analysis

The research design for this study is correlational and quasi-experimental. Complete control of all variables was not possible due to the limitations of the individuals who served as subjects, and the limitations created in studying a clinical population. More descriptive, correlational, and observational research is needed in the study of

eating disorders before adequate experimental data can be developed (Campbell & Stanley, 1963).

Prior to analysis of the data, the eating disorder group was categorized by DSM III diagnosis (anorexia nervosa or bulimia) to ascertain the number of participants of each diagnosis. If data was available from a sufficient number of each diagnosis it was planned that a *t* test would be performed to assess the significance of the demographic, IBS, and SWB differences between the bulimics and anorexics. Those with a diagnosis of anorexia nervosa would be considered as a separate group for further analysis if they differed significantly from the bulimic patients. However, if only a small number of the patients were anorexic, it was planned to include them with the bulimic patients under the general classification of "eating disordered."

Due to an insufficient number of anorexic participants, it was decided that those with diagnoses of anorexia nervosa and bulimia would be considered together as one group. Only five of the eating disorder inpatients were diagnosed as anorexic at the time of the intake interview by the admitting

psychiatrist in the eating disorders program. None of the outpatient participants in the eating disorder program had a diagnosis of anorexia.

The inpatients and outpatients with eating disorders were considered as two separate groups. This allowed use of analysis of variance for statistical comparison of the means of the two eating disorder groups and the group of medical clinic outpatients. It was thought that some interesting contrasts might exist between the inpatient and outpatient eating disorder subjects, although no specific predictions were made. The number of inpatient eating disorder participants totalled 36 and the outpatients totalled 27.

The data for the eating disorder groups was compared with a group of medical outpatients. This group was utilized as it was anticipated that the female norm group for the IBS, which was based on a sample in the South consisting of 22% black females, might differ from the a group of Caucasian women in the Northwest. Mauger and Adkinson (1980) reported that blacks scored higher than whites on several

scales of the IBS. They stated that "it may be that special norms should be used for scales in which significant demographic influences occur" (p. 10).

The demographic data for the three groups is described utilizing the categories of age, education, income, marital status and frequency of church attendance. These are reported in numbers and percentages in each category. Continuous variables such as age and education are reported in means and standard deviations. Nominal and ordinal data is reported by frequency distribution.

An analysis of variance was performed on the three groups (inpatient, outpatient, and medical clinic group) to assess significant differences in their mean scores on the IBS and SWB. The relationship between spiritual well-being and assertiveness was explored through a correlational analysis for each of the three groups.

Multiple regression analyses were performed to examine the impact of demographic variables on assertiveness and spiritual well-being. It was anticipated that the eating disorder groups and the medical clinic group might differ in age, education,

income, marital status, and/or frequency of church attendance. These demographic differences could influence scores on the IBS and SWB for the groups.

A two-tailed test of statistical significance was utilized and the critical value for r and F was set at $p < .05$, unless otherwise noted. All statistics were calculated using the Statistical Package for the Social Sciences (SPSS PC+) on an IBM XT computer system. Correlations were calculated using a Pearson Product Moment Correlation Coefficient.

Missing Data

Eating Disorder Patients

Data from three of the 66 female participants was eliminated from the analysis. One patient was readmitted four months after her initial admission, so data from the second testing session was not utilized. Two patients' scores on the IBS validity scales were sufficiently high to warrant eliminating them from the data analysis. An IBS profile was considered invalid if any validity T-score was above 70 or any two validity T-scores were above 65.

Of the 63 patient responses used for data analysis, one individual did not complete the Spiritual Well-Being Scale. This individual's scores on the IBS were retained for data analysis. Missing information on the demographic questionnaire included 3 responses to income, and 1 response to frequency of church attendance.

Medical Clinic Patients

All persons who were 18 to 60 years of age who came to the medical clinic on one of the three days of data collection were asked to participate in the study. At the completion of the third day 128 people had been asked to participate, but 13 people refused for various reasons. Typical reasons for not participating included "not feeling well enough," "prefer not to," and "not really interested." Of the 115 people who were given the questionnaire and test material, 27 did not return the data, yielding a return of 88 individuals or 77% of those initially agreeing to participate. Of the 27 who failed to return the materials, little is known. The total return rate of all patients who were invited to participate was 88 out of 128 or 69%.

Of the 88 who completed the material, only results from females were used for this study, yielding a total of 61 participants. Five of these respondents' scores were not utilized as they had validity scores on the IBS which were above the cut-off, suggesting that the results were not meaningful. A total of 56 individuals was used for data analysis. The only missing data for these 56 individuals were 2 responses to income and 2 responses to years of education on the demographic questionnaire.

Demographic Data

The demographic data describing the three groups in this study is presented in two sections. The eating disorder patients, both inpatient and outpatient groups, are described first, followed by the medical clinic outpatients.

Eating Disorder Patients

The eating disorder patient data is presented as two separate groups: inpatients and outpatients. A set of descriptive statistics for the demographics including mean, standard deviation, and sample size,

are available in Table 1. Age and education are continuous variables presented in number of years. Income is represented by a range from 1 to 6, with 1 = "less than $5,000 per year" and 6 = "$30,000 or more per year". Frequency of church attendance is represented on a scale of 1 to 6, with 1 = "less than once a year" and 6 = "more than once a week" (see Appendix F for value labels for income and frequency of church attendance).

Eating Disorder Inpatients

Of the 37 eating disorder inpatient volunteers for this study, all were Caucasian in ethnicity. They ranged in age from 17 to 29, with a mean age of 26.84. The average number of years of education was 12.97, with a range from 10 to 18 years. All but four participants had completed high school, and two of those 4 were 17 years of age, still attending high school.

Gross family income for the subjects ranged from one person at less than $5,000 per year to six at over $30,000 per year. Four individuals (11.8%) reported earnings of less than $10,000 per year; 11 (32.3%) stated that their family earnings were between

$10-20,000 per year; 10 (29.4%) had income in the $20-30,000 range; nine (26.5%) cited incomes of over $30,000.

Of the 37 eating disorder inpatients, 16 (43.2%) reported never having been married, 14 (37.8%) were currently married, 5 (13.5%) were divorced and 2 (5.4%) described themselves as single living as married.

The reported frequency of attending church for this sample ranged from 11 (30.6%) who attended church less than once a year to 10 (27.8%) who attended at least weekly. Eight (22.3%) of the subjects reported church attendance between 1-11 times a year. The remaining 7 (19.4%) attended church 1-3 times per month.

Table 1

Descriptive Demographic Statistics for the Three Groups

	Groups					
	Eating Disorder Inpatients		Eating Disorder Outpatients		Medical Clinic Patients	
	(n= 37)		(n = 26)		(n = 56)	
Variable	M	SD	M	SD	M	SD
AGE	26.84	7.84	36.62	8.59	37.43	10.23
EDUCATION	12.97	1.74	13.96	1.87	14.22	2.29
INCOME	4.41	1.42	5.15	.97	4.30	1.19
FREQATT	3.14	1.71	3.00	1.98	5.18	1.56

Note: FREQATT = Frequency of church attendance.

Eating Disorder Outpatients

Of the 25 eating disorder outpatient volunteers all were Caucasian in ethnicity. They ranged in age from 24 to 60, with a mean age of 36.62. The average number of years of education was 13.96, with a range from 12 to 19.

Gross family income for the subjects ranged from two people at $10-15,000 per year to four at over $60,000 per year. Two individuals (7.7%) reported earnings of $10-15,000 per year; four (15.4%) stated that their family earnings were between $15-19,000 per year; eight (30.8%) had income in the $20-30,000 range; 12 (46.2%) cited incomes of over $30,000, including three in the $40-60,000 range and four above $60,000.

Of the 25 eating disorder outpatients, 3 (11.5%) reported never having been married, 17 (65.4%) were currently married, 5 (19.2%) were divorced and 1 (3.8%) described herself as single living as married.

The reported frequency of attending church for this sample ranged from 10 (38.5%) who attended church less than once a year to 10 (38.5%) who attended at least weekly. Three (11.5%) of the subjects reported church attendance of only once or twice a year. The remaining 3 (11.5%) attended church 3-11 times per year.

Medical Clinic Patients

Of the 56 medical clinic outpatient volunteers all were Caucasian in ethnicity. They ranged in age

from 21 to 60, with a mean age of 37.43. The average number of years of education was 14.22, with a range from 12 to 22.

Gross family income for this group ranged from three people (5.6%) at $5-9,000 per year to two at over $50,000 per year. Thirteen individuals (24.1%) reported earnings of $10-15,000 per year; 13 (24.1%) stated that their family earnings were between $15-19,000 per year; 15 (27.8%) had income in the $20-30,000 range; 10 (18.5%) cited incomes of over $30,000, including one above $50,000.

Of the 56 medical clinic outpatients, 6 (10.7%) reported never having been married, 43 (76.8%) were currently married, 6 (10.7%) were divorced and 1 (1.8%) described herself as single living as married.

The reported frequency of attending church for this sample ranged from 10 (17.9%) who attended church less than once a year or not at all to 24 (42.9%) who attended more than once a week. Six (10.7%) of the subjects reported church attendance of 1-11 times a year. Two (3.6%) attended 1-3 times per month and 14 (25.0%) claimed weekly attendance.

Comparison of Demographics for the Three Groups

A comparison of the demographic statistics for all three groups is provided in Tables 1-4. The eating disorder inpatients were approximately ten years younger in age than the other two groups. The medical clinic group reported a greater frequency of church attendance than the two eating disorder groups. These two differences among the groups are discussed more fully in Chapter 4.

A comparison of the three groups in percentages of income, marital status and frequency of church attendance is provided in Tables 2, 3, and 4. A higher percentage of the eating disorder inpatients have never been married, which may be related to their lower average age. Differences among the groups are discussed in Chapter 4.

Table 2

Gross Family Income for the Three Groups

	Eating Disorder Inpatients (n = 37)	Eating Disorder Outpatients (n = 26)	Medical Clinic Patients (n = 56)
Less than $5,000 per year	2.9%	---	---
$5-9,999 per year	8.8%	---	5.6%
$10-14,999 per year	14.7%	7.7%	24.1%
$15-19,999 per year	17.6%	15.4%	24.1%
$20-29,999 per year	29.4%	30.8%	27.8%
$30,000 or more per year	26.5%	46.2%	18.5%

Table 3

Marital Status of the Three Groups

	Eating Disorder Inpatients (n = 37)	Eating Disorder Outpatients (n = 26)	Medical Clinic Patients (n = 56)
Never Married	43.2%	11.5%	10.7%
Married	37.8%	65.4%	76.8%
Divorced	13.5%	19.2%	10.7%
Living together	5.4%	3.8%	1.8%

Table 4

Frequency of Church Attendance for the Three Groups

	Eating Disorder Inpatients (n = 37)	Eating Disorder Outpatients (n = 26)	Medical Clinic Patients (n = 56)
Less than once a year	30.6%	38.5%	5.4%
Once or twice a year	5.6%	11.5%	3.6%
3-11 times a year	16.7%	11.5%	7.1%
1-3 times a month	19.4%	0 %	3.6%
Weekly	22.2%	26.9%	25.0%
More than once a week	5.6%	11.5%	42.9%
Not at all	---	---	12.5%

Descriptive Statistics

This section presents the descriptive statistics for the IBS and SWB results. This information is discussed for all three samples. The IBS results for the three groups is presented in Table 5. This table lists the mean, standard deviation (SD), and group size. The SWB results for the three groups are presented in Table 6.

Interpersonal Behavior Survey

The IBS provides both general and specific measures of aggressive and assertive behavior and three subscales which measure relationship. The raw scores for the original norm group of 400 females were converted to T-scores with a mean of 50 and standard deviation of 10 (Mauger & Adkinson, 1980). The T-scores are reported for subjects in this study.

Eating Disorder Inpatients

The mean score for inpatients on the General Aggressiveness, Rational (GGR) scale was 47.65 (SD 9.82), with a range of 43 points. The minimum GGR score was 33, with a maximum T-score of 76. The General Assertiveness, Rational (SGR) mean score was 41.35 (SD 8.73). The range for the SGR was 34 points, with a minimum of 25 and a maximum of 59. The three relationship scales were each above the mean score of the norm group. On the Conflict Avoidance subscale (CA) the inpatient group had a mean score of 53.73 (SD 8.92), with a minimum score of 37, a maximum of 73, and a range of 36 points. The Dependency (DP) subscale yielded a group mean of 57.81 (SD 8.80), with a range of 33 points. The minimum score for the DP subscale was 39 and the maximum was 72. Eating

disorder inpatients had a mean score on Shyness (SH) of 61.49 (SD 11.23), with a range of 38 points, from a low of 40 to a high T-score of 78.

Eating Disorder Outpatients

The mean score for outpatients on the General Aggressiveness, Rational (GGR) scale was 45.35 (SD 7.22), with a range of 32 points. The minimum GGR score was 33, with a maximum T-score of 68. The General Assertiveness, Rational (SGR) mean score was 45.00 (SD 13.02). The range for the SGR was 43 points, with a minimum of 23 and a maximum of 66. The three relationship scales were each above the mean score of the norm group. On the Conflict Avoidance subscale (CA) the outpatient group had a mean score of 55.85 (SD 10.52), with a minimum score of 35, a maximum of 73, and a range of 38 points. The Dependency (DP) subscale yielded a group mean of 53.88 (SD 11.03), with a range of 37 points. The minimum score for the DP subscale was 37 and the maximum was 74. Eating disorder outpatients had a mean score on Shyness (SH) of 57.81 (SD 9.79), with a range of 31 points, from a low of 40 to a high T-score of 71.

Medical Clinic Patients

The mean score for the medical clinic outpatients on the General Aggressiveness, Rational (GGR) scale was 42.23 (SD 6.40), with a range of 35 points. The minimum GGR score was 33, with a maximum T-score of 68. The General Assertiveness, Rational (SGR) mean score was 49.04 (SD 9.79). The range for the SGR was 41 points, with a minimum of 24 and a maximum of 65. The three relationship scales were similar to the mean score of the norm group. On the Conflict Avoidance subscale (CA) the medical clinic group had a mean score of 51.66 (SD 10.60), with a minimum score of 26, a maximum of 75, and a range of 49 points. The Dependency (DP) subscale yielded a group mean of 49.48 (SD 10.39), with a range of 42 points. The minimum score for the DP subscale was 28 and the maximum was 70. Medical outpatients had a mean score on Shyness (SH) of 52.36 (SD 10.24), with a range of 37 points, from a low of 38 to a high T-score of 75.

Table 5

Interpersonal Behavior Survey Comparison of Groups

	Group					
	Eating Disorder Inpatients (n = 37)		Eating Disorder Outpatients (n = 26)		Medical Patients (n = 56)	
Scales	M	SD	M	SD	M	SD
Validity Scales						
DE	48.11	10.55	50.27	9.29	54.59	8.06
IF	49.89	8.25	45.15	6.06	45.61	4.66
IM	44.49	9.29	49.31	7.49	53.71	7.32
Aggressiveness Scales						
GGR	47.65	9.82	45.35	7.22	42.23	6.40
HS	47.86	9.94	46.08	7.53	41.71	6.55
EA	51.54	10.68	46.19	8.78	44.30	8.18
DR	46.86	8.39	45.08	7.60	42.77	6.50
VE	48.32	10.13	45.46	10.43	44.38	6.89
PH	47.35	8.67	45.08	4.53	45.20	6.60
PA	53.68	10.52	48.35	10.12	45.16	7.89

Table 5 (cont.)

Interpersonal Behavior Survey Comparison of Groups

	Group					
	Eating Disorder Inpatients		Eating Disorder Outpatients		Medical Patients	
Scales	M	SD	M	SD	M	SD
Assertiveness Scales						
SGR	41.35	8.73	45.00	13.02	49.04	9.79
SC	39.38	9.13	44.92	12.74	46.46	9.10
IA	46.22	10.12	46.62	10.79	49.71	10.48
DA	45.03	8.69	45.62	12.02	49.37	10.54
FR	44.92	9.97	45.50	11.48	48.77	9.57
PR	43.41	10.02	47.58	10.92	49.73	7.99
RE	45.11	10.25	49.08	10.28	47.59	9.98
RF	43.57	10.65	45.62	11.93	51.43	9.72
Relationship Scales						
CA	53.73	8.92	55.85	10.52	51.66	10.60
DP	57.81	8.80	53.88	11.03	49.48	10.39
SH	61.49	11.23	57.81	9.79	52.36	10.24

Spiritual Well-Being Scale

The SWB Scale provides a six point scale indicating relative degrees of well-being. On the RWB and EWB subscales a cumulative score of 10 indicates low spiritual well-being and 60 indicates high RWB and EWB. The SWB subscale is derived by adding the RWB score to the EWB score. The lowest possible SWB score is 20 and the highest is 120. Table 6 presents the Spiritual Well-Being Scale results for each of the three groups.

Eating Disorder Inpatients

The mean RWB score for the inpatients was 41.65 (SD 10.04). With a range of 36 points, the minimum score was 24 and the maximum score was 60. EWB scores averaged 35.92 (SD 8.20), with a minimum of 13 and maximum score of 55. The range for the EWB scores was 42 points. SWB scores yielded a mean of 77.59 (SD 15.43), and a range of 71. The lowest SWB score was 44 and the highest 115.

Eating Disorder Outpatients

The outpatients with eating disorders had a mean RWB score of 39.56 (SD 12.15). With a range of 43 points, the minimum score was 19 and the maximum score was 58. EWB scores averaged 40.80 (SD 8.67), with a

minimum of 19 and maximum score of 58. The range for the EWB scores was 39 points. SWB scores yielded a mean of 80.36 (SD 17.05), and a range of 73. The lowest SWB score was 39 and the highest 112.

Table 6

Spiritual Well-Being Comparison of Groups

	Group					
	Eating Disorder Inpatients (n = 37)		Eating Disorder Outpatients (n = 25)		Medical Patients (n = 56)	
Variable	M	SD	M	SD	M	SD
RWB	41.65	10.04	39.56	12.15	51.50	9.67
EWB	35.92	8.20	40.80	8.67	48.50	8.38
SWB	77.59	15.43	80.36	17.05	99.89	16.01

Medical Clinic Patients

The medical clinic patients' mean score for the RWB was 51.50 (SD 9.67). With a range of 43 points, the minimum score was 17 and the maximum score was 60. EWB scores averaged 48.50 (SD 8.38), with a minimum of

28 and maximum score of 60. The range for the EWB scores was 32 points. SWB scores yielded a mean of 99.89 (SD 16.01), and a range of 59. The lowest SWB score was 61 and the highest 120.

General Results

An analysis of variance was computed for Hypotheses 1 through 7 to compare the three groups. A multiple range test using the Scheffe procedure was applied to those variables where the F test was significant to ascertain which group means accounted for the differences. The Scheffe method was chosen as a post hoc test because of its conservative limits. Table 7 records the significant ($p < .05$) F test differences between the two eating disorder groups and the medical clinic group for the IBS. Table 8 provides the SWB analysis of variance results.

Hypothesis One

H_1 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in assertiveness, as measured by the assertiveness scales of the IBS. This hypothesis is partially rejected as analysis of

variance indicated that the groups differed significantly in four of the eight assertiveness scales.

Post hoc analyses of the four assertiveness subscales (SGR, SC, PR, RF) on which the groups differed revealed that all four subscales distinguished between the inpatient eating disorder group and the medical patient group. None of the scales were significantly different for the outpatient eating disorder group and the medical clinic group nor between the inpatient and outpatient eating disorder groups.

Hypothesis Two

H_2 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in aggression as measured by the aggressiveness subscales of the IBS. This hypothesis is partially rejected as analysis of variance showed that the groups differed significantly on five of the seven aggressiveness scales.

Of the five aggressiveness subscales (GGR, HS, EA, DR, PA) which differed significantly among the three groups, all five distinguished between the

inpatient eating disorder group and the medical patients. None of the subscales differed between the outpatient eating disorder group and the medical patient group nor between the the inpatient and outpatient eating disorder groups.

Hypothesis Three

H_3 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group on the relationship scales of the IBS. This hypothesis is partially rejected as analysis of variance indicated that the groups differed significantly on two of the three relationship scales.

Of the two relationship subscales (DP, SH) which differed significantly among the three groups, both distinguished between the inpatient eating disorder group and the medical patient group. The relationship subscales did not differ between the outpatient eating disorder group and the medical clinic group nor between the inpatient and outpatient eating disorder groups.

Table 7

F-Test for Analysis of Variance for IBS and Groups

Scales	F	p	Groups 1-2	2-3	1-3
Validity Scales					
DE	5.943	.0035			*
IF	6.397	.0023	*		*
IM	14.851	.0000			*
Aggressiveness Scales					
GGR	5.553	.0050			*
HS	7.252	.0011			*
EA	7.082	.0013			*
DR	3.528	.0326			*
VE	2.265	NS			
PH	1.269	NS			
PA	9.401	.0002			*

Table 7 (cont.)

F-Test for Analysis of Variance for IBS and Groups

Scales	F	p	Groups 1-2	2-3	1-3
Assertiveness Scales					
SGR	6.319	.0025			*
SC	5.754	.0041			*
IA	1.523	NS			
DA	2.354	NS			
FR	1.906	NS			
PR	5.134	.0073			*
RE	1.275	NS			
RF	6.883	.0015			*
Relationship Scales					
CA	1.596	NS			
DP	7.741	.0007			*
SH	8.783	.0003			*

Note. d/f = 2, 116 for all variables.

1 = Eating Disorder Inpatients. 2 = Eating Disorder Outpatients. 3 = Medical Clinic Patients.

* denotes pairs of groups significantly different at the .05 level, as determined by Scheffe post hoc test.

Hypothesis Four

H_4 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in existential well-being as measured by the EWB subscale of the SWB Scale. This hypothesis is rejected as both the inpatient and outpatient eating disorder groups differed from the medical clinic group in existential well-being. The two eating disorder groups did not differ significantly from each other on this scale. Table 8 presents the analysis of variance findings for the subscales of the SWB.

Table 8

F-Test for Analysis of Variance for Spiritual Well-Being Scales and Groups

Scales	F	p	Groups 1-2	1-3	2-3
RWB	16.017	.0000		*	*
EWB	26.086	.0000		*	*
SWB	25.837	.0000		*	*

Note. d/f = 2, 115 for all three variables

1 = Eating Disorder Inpatients. 2 = Eating Disorder Outpatients. 3 = Medical Clinic Patients.

* denotes pairs of groups significantly different at $p < .05$ level, as determined by Scheffe post hoc test.

Hypothesis Five

H_5 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in religious well-being as measured by the RWB subscale of the SWB Scale. This hypothesis is rejected as both the inpatient and outpatient eating disorder groups differed from the medical patient group in religious well-being. The

two eating disorder groups did not differ significantly from each other on this scale. Table 8 presents the analysis of variance findings for the RWB subscale of the SWB.

Hypothesis Six

H_6 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in spiritual well-being as measured by the SWB Scale. This hypothesis is rejected as both the inpatient and outpatient eating disorder groups differed from the medical patient group in spiritual well-being. The two eating disorder groups did not differ significantly from each other on this scale. Table 8 presents the analysis of variance findings for the SWB.

Hypothesis Seven

H_7 stated that assertive behavior as measured by the Interpersonal Behavior Survey SGR scale would be positively correlated with spiritual well-being for individuals with eating disorders. This hypothesis is partially accepted, as the SGR scale was significantly positively correlated with SWB for the inpatients with

eating disorders. However, for the eating disorder outpatients the SGR and SWB correlation was not significant. When a separate correlational analysis was run with both eating disorder groups combined, SWB and SGR were not significantly correlated.

SWB subscales were also considered in this hypothesis. RWB scores were not significantly correlated with the SGR subscales in either of the eating disorder groups. The EWB subscale was positively correlated with SGR for the inpatient group at $p < .01$ level, for the outpatient group at $p < .05$, and for both groups combined at $p < .001$. Tables 9, 10, and 11 present the correlation of IBS and SWB scores for the eating disorder groups. Table 12 presents the correlation matrix for the medical clinic outpatient group.

Table 9

Eating Disorder Inpatient Group Correlation Matrix For the IBS and SWB

Scales	RWB	EWB	SWB
Validity Scales			
DE	.1226	-.0224	.0660
IF	-.1024	-.2505	-.1978
IM	-.0816	.1782	.0406
Aggressiveness Scales			
GGR	-.1879	-.2988*	-.2808*
HS	-.1488	-.1987	-.2032
EA	-.1259	-.1682	-.1714
DR	-.0431	-.0377	-.0470
VE	-.2369	-.2827*	-.3028*
PH	-.1090	-.3431*	-.2555
PA	-.2825*	-.4793***	-.4381**

Table 9 (cont.)

Eating Disorder Inpatient Group Correlation Matrix For the IBS and SWB

Scales	RWB	EWB	SWB
Assertiveness Scales			
SGR	.1000	.3851**	.2712*
SC	.0321	.4208**	.2451
IA	.1892	.1351	.1972
DA	.1224	.4781***	.3340*
FR	.0111	.0981	.0590
PR	-.0206	.2695*	.1280
RE	.1008	.3282*	.2404
RF	.0087	.2813*	.1564
Relationship Scales			
CA	.0377	.0593	.0561
DP	-.1885	-.1550	-.2066
SH	-.1096	-.3413*	-.2562

Note. *$p < .05$, ** $p < .01$, *** $p < .001$, one-tailed.

Table 10

Eating Disorder Outpatient Group Correlation Matrix For the IBS and SWB

Scales	RWB	EWB	SWB
Validity Scales			
DE	.2343	.3384*	.3391*
IF	.0116	-.2174	-.1023
IM	.1551	.3966*	.3123
Aggressiveness Scales			
GGR	-.4266*	-.4183*	-.5167**
HS	-.3303*	-.4233*	-.4507**
EA	-.3224	-.4003*	-.4334*
DR	-.2694	-.0601	-.2225
VE	-.3673*	-.2067	-.3669*
PH	.0608	-.2662	-.0921
PA	.0533	-.5238**	-.2285

Table 10 (cont.)

Eating Disorder Outpatient Group Correlation Matrix For the IBS and SWB

Scales	RWB	EWB	SWB
Assertiveness Scales			
SGR	-.1869	.4090*	.0748
SC	-.0178	.5830***	.2838
IA	-.3674*	.2553	-.1320
DA	-.3176	.2425	-.1030
FR	-.0696	.1773	.0406
PR	.1433	.4950**	.3540*
RE	-.0967	.4845**	.1775
RF	-.0599	.1746	.0461
Relationship Scales			
CA	.0332	-.3166	-.1374
DP	.1781	-.4709**	-.1126
SH	.0873	-.2749	-.0776

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, one-tailed.

Table 11

Combined Eating Disorder Group Correlation Matrix for the IBS and SWB

Scale	RWB	EWB	SWB
Validity Scales			
DE	.1557	.1420	.1815
IF	-.0260	-.3007**	-.1789
IM	-.0130	.3074**	.1566
Aggressiveness Scales			
GGR	-.2554*	-.3513**	-.3634**
HS	-.2028	-.2872**	-.2936**
EA	-.1707	-.3022**	-.2794**
DR	-.1263	-.0759	-.1262
VE	-.2797**	-.2747*	-.3377**
PH	-.0397	-.3325**	-.2082*
PA	-.1065	-.5302***	-.3587**

Table 11 (cont.)

Combined Eating Disorder Group Correlation Matrix For the IBS and SWB

Scale	RWB	EWB	SWB
Assertiveness Scales			
SGR	-.0699	.4130***	.1764
SC	-.0153	.5265***	.2745*
IA	-.0635	.1757	.0532
DA	-.1141	.3520**	.1129
FR	-.0302	.1347	.0522
PR	.0377	.3927***	.2368*
RE	-.0025	.4172***	.2240*
RF	-.0328	.2492*	.1131
Relationship Scales			
CA	.0266	-.0816	-.0261
DP	.0168	-.3428**	-.1746
SH	-.0113	-.3431**	-.1952

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, one-tailed.

Table 12

Medical Outpatient Group Correlation Matrix for the IBS and SWB

Scales	RWB	EWB	SWB
Validity Scales			
DE	.0785	.1708	.1365
IF	-.0565	-.2062	-.1353
IM	.2372*	.3318**	.3260**
Aggressiveness Scales			
GGR	-.2709*	-.2027	-.2802*
HS	-.2144	-.0384	-.1572
EA	-.0557	-.0457	-.0565
DR	-.1306	-.0282	-.1033
VE	.0105	.0310	.0141
PH	-.1072	.0478	-.0406
PA	-.3114**	-.4405***	-.4264***

Table 12 (cont.)

Medical Outpatient Group Correlation Matrix for the IBS and SWB

Scales	RWB	EWB	SWB
Assertiveness Scales			
SGR	.2204*	.3532**	.3167**
SC	.2828*	.4635***	.4228***
IA	.0960	.1505	.1320
DA	.0600	.2765*	.1748
FR	.1616	.3602**	.2946**
PR	.2561*	.2925**	.3102**
RE	.1358	.2993**	.2466*
RF	.1852	.2474*	.2466*
Relationship Scales			
CA	-.2211*	-.3147**	-.2998**
DP	-.0736	-.1294	-.1053
SH	-.1873	-.2848*	-.2687*

* $p < .05$, ** $p < .01$, *** $p < .001$, one-tailed.

Research Questions

In addition to the hypotheses, three research questions were asked. The first question examined the

impact of demographic variables on the IBS and SWB scores. Five stepwise multiple regressions were run to predict IBS (SGR and GGR) and SWB (RWB, EWB, and SWB) scores by the demographic variables. Age was the only demographic variable that accounted significantly for the variance in the IBS subscale scores. For SGR scores R = .22187, significance of F = .0187. On the GGR subscale R = .30064, significance of F = .0013.

For the SWB subscales, frequency of church attendance was the only demographic variable that accounted significantly for the variance in all three subscale scores. For the RWB subscale, R = .52006, significance of F = .0000. On the EWB, R= .37221, with significance of F = .0001. The multiple regression analysis for the SWB subscale resulted in R = .50077, with significance of F = .0000.

The second research question explored the possible influence of demographic variables on the group membership. The demographic variables considered were age, education, income, marital status, and frequency of church attendance. A stepwise multiple regression analysis was used to predict group membership by the demographic variables. Frequency of church attendance and age were the only

two demographic variables which accounted for a significant amount of the variance in group membership, with R = .55048, significance of F = 0.0. Table 13 details the results of the multiple regression analysis.

Table 13

Stepwise Multiple Regression Results with Group as the Dependent Variable

Variables in the Equation after .05 Limits Reached					
Variable	B	SE B	Beta	T	Sig T
FREQATT	.16467	.03655	.37885	4.505	.0000
AGE	.02534	7.12796E-03	.29897	3.555	.0006
(Constant)	.64098	.25250		2.538	.0125

A third research question explored whether a difference existed in IBS and SWB scores between the inpatient and outpatient eating disorder groups. This question was answered as part of the analysis of variance for Hypotheses One through Seven.

Summary

In summary, Hypothesis One was partially rejected, as the eating disorder inpatients differed significantly from the medical outpatient group in four of the eight IBS assertiveness scales (General Assertiveness, Self-Confidence, Praise, and Refusing Demands). Hypothesis Two was also partially rejected as five of the seven IBS aggressiveness scale scores (General Aggressiveness, Hostile Stance, Expressing Anger, Disregard for Rights, and Passive Aggressiveness) were different for the eating disorder inpatient group and the medical patients. Hypothesis Three was partially rejected as the inpatients with eating disorders differed from the medical outpatient group on two of the three IBS relationship scales (Dependency and Shyness).

Hypotheses Four, Five, and Six were rejected, as both the eating disorder groups differed from the medical outpatient group in existential well-being, religious well-being, and spiritual well-being.

Hypothesis Seven was partially accepted as the General Assertiveness (SGR) scale was positively correlated with SWB for the inpatients with eating disorders. EWB scores were positively correlated with

the SGR scale of the IBS for inpatients, outpatients, and for the two groups combined. RWB subscale scores were not positively correlated at a significant level with the SGR scale of the IBS for either of the eating disorder groups.

The first two research questions explored the influence of demographic variables on IBS and SWB scores and on group membership. The only demographic variable which was a predictor of the SGR and GGR subscales of the IBS was age. Frequency of church attendance was a significant predictor of RWB, EWB, and SWB scores. Both frequency of church attendance and age were predictors of group membership.

CHAPTER 4

DISCUSSION

Overview of the Discussion

In this chapter the results of the study are evaluated and interpreted in six sections. The first section reviews the demographic data of the subjects. The second section discusses the hypotheses and research questions. The implications of the results are presented in the third section. Section four reviews the limitations of the study. In the fifth section suggestions are made for future research. The chapter is summarized in the final section.

Demographic Data

Age

The group demographic data was presented in Tables 1, 2, 3, and 4. The inpatient group was younger in age, with a mean age of 26.84, than either the outpatient with eating disorders (Mean = 36.62) or the medical clinic group (Mean = 37.43). This age

difference of nearly 10 years less for the inpatient group may account for some of the differences between groups on the various subscales of the SWB and IBS. Results from multiple regression analyses indicated that age was a predictor of both SGR and GGR scores on the IBS and of group membership. The impact of age is presented in more detail later.

Education

The number of years of education for the three groups did not differ significantly, although the medical clinic group was the most highly educated, with an average of 14.22 years. The outpatient eating disorder group was the next highest in education, with an average of 13.96. The inpatient group, however, averaged 12.97 years of education, which is one less year of schooling than the eating disorder outpatients and 1.25 years less than the medical patient group. This difference in education may have been partly related to the younger age of the inpatient group. Multiple regression analyses indicated that years of education was not a significant predictor of either IBS and SWB scores or of the group membership.

Marital Status

Table 3 presented a comparison of the marital status of the three groups. A higher percentage of the eating disorder inpatients were never married (43.2%) than were either the outpatients (11.5%) or the medical clinic group (10.7%). The inpatients' single status may be related to their younger age. Only 37.8% of the inpatients were married, contrasted with 65.4% of the outpatients with eating disorders and 76.8% of the medical patients. More than twice as many women in the medical clinic group were married as the number in the eating disorder inpatient group.

A slightly higher percentage of the outpatient eating disorder group was divorced (19.2%) than was the inpatient group (13.5%) or the medical patient group (10.7%). The only widowed individual in any of the groups was in the medical clinic group. One member of the eating disorder outpatient group (3.8%) and two members of the inpatient group (5.4%) reported living together as married.

The differences in marital status among the groups appears to be related to the younger average age of the inpatient group, relative to the other two

groups. Marital status did not prove to be a significant predictor of either IBS scores, SWB scores, or group membership.

Income

Tables 1 and 2 presented information on the income levels of the three groups. The inpatient eating disorder group has a wider diversity in gross family income than the other two groups. Earnings of less than $10,000 per year are reported by 11.7% of this group. However, 26.5% report over $30,000 in income. The younger age and single marital status of this group may help to explain this diversity, as young, single females would be anticipated to have less family income than a group of older, married women. A perusal of the data indicated that those inpatients with family earnings over $30,000 per year were either married or divorced, with only one, who was 17 years of age, reporting being single. Presumbly she resides at home with her family and the reported income is that of her parents.

The majority of the outpatient eating disorder group reported a higher income bracket, with 46.2% indicating earnings of $30,000 or more and 30.8%

earning $20-29,000 per year. Those with earnings above $30,000 were all married, except for one woman who listed her marital status as divorced.

The medical clinic group's gross family earnings were more evenly distributed in the middle income ranges: 24.1% reported earnings of $10-14,000, 24.1% reported $15-19,000, and 27.8% cited $20-29,000 as their yearly income. Only 5.6% of this group earn less than $10,000 per year; 18.5%, all of whom were married, reported more than $30,000 per year.

It appears that an older age and married status are strongly related to the higher earnings for these three groups of women. Income level was not a predictor of either IBS or SWB results or of group membership, according to multiple regression analyses.

Frequency of Church Attendance

Tables 1 and 4 provided information about the groups' church attendance rates. The group of medical patients attended church more frequently than either of the eating disorder groups. Although the number of women reporting weekly church attendance is comparable for the three groups, 42.9% of the medical clinic group reported attending church more than once a week

whereas only 5.6% of the eating disorder inpatients and 11.5% of the outpatients reported attendance more than once per week. Similarly, more of the inpatients (30.6%) and outpatients (38.5%) with eating disorders reported minimal church attendance of less than once a year, but only 17.9% of the medical patient group reported such infrequent attendance or reported no church attendance. In general, the medical clinic group reported more frequent church attendance.

Frequency of church attendance was an important demographic factor in predicting scores on the SWB subscales, but not on the IBS scales. Frequency of church attendance was also a predictor of group membership, according to multiple regression analyses.

The higher frequency of church attendance among the medical clinic group may have been influenced by the religious affiliation of the doctors in the clinic. The medical staff is reported to have a Christian church affiliation, which may impact the type of patients who seek medical services in the clinic.

Summary of Demographic Data

The inpatient eating disorder group was generally younger in age than either of the other two groups. This age difference may be related to other demographic differences, such as education, marital status, and income. The inpatients were also higher in the percentage of single women, had approximately one less year of education, and reported more diversity in income level.

Demographic variables which were important predictors of IBS and SWB subscale scores included age and frequency of church attendance. The importance of these factors will be discussed more thoroughly in the hypotheses and research section.

Hypotheses and Research Questions

Assertiveness

H_1 suggested that there would be no significant difference among the eating disorder groups and the medical outpatient group in assertiveness as measured by the assertiveness subscales of the IBS. This hypothesis was partially rejected as the inpatient eating disorder group differed significantly from the

medical patients in four of the eight assertiveness scales. These scales will be discussed separately.

On scales where a difference was found, those with eating disorders scored lower, indicating less assertiveness. There were no significant differences between the two eating disorder groups nor between the outpatient group and the medical clinic group, utilizing the Scheffe post hoc test.

General Assertiveness, Rational (SGR)

There was a significant difference on this scale between the inpatients with eating disorders and the medical clinic group. The SGR scale provides a general measure of assertiveness, covering a broad range of assertive behaviors.

The finding of a difference in the overall assertiveness measured by the SGR scale is inconsistent with Greenberg's (1986) study of bulimics on a college campus. Utilizing the CSES to measure assertiveness, she found no difference in assertiveness between bulimic and non-bulimic college students. The seemingly contradictory findings between Greenberg's study and the current study may be due to Greenburg's use of a different scale, which is less comprehensive than the IBS. A second study using

the CSES, however, found that bulimic students scored lower in assertiveness than normals and non-bulimic psychotherapy clients (McCanne, 1985). The present study lends further support to McCanne's findings, and enables theories relating eating disorders and assertiveness to expand beyond the college campus.

These findings also support the theoretical viewpoint of Neuman and Halvorson (1983) who comment that "bulimics are not known for their directness or assertion skills" (p. 50). While severity of the eating disorder was not a variable in the present study, the finding that those with eating disorders differ in general assertiveness skills from a normal population also relate to findings by Hawkins and Clement (1980). These authors noted that even with female college students who do not meet the DSM III criteria for bulimia, assertiveness was negatively correlated with the severity of the students' binge eating.

Self-Confidence (SC)

There was a significant difference on this scale between the inpatients with eating disorders and the medical clinic patients. The SC scale is a measure of one's self-assurance about her interpersonal

relationship skills. The inpatients' perception of themselves as less capable interpersonally may in part be related to their hospitalization.

Lower self-confidence may indicate that these inpatients have a realistic perception of the discrepancy between their knowledge of how to relate with others and their actual behavior. Johnson and Pure (1986) state that "while some bulimic persons may have interpersonal difficulties due to skill deficits, most are knowledgeable about proper interpersonal responses but inhibit themselves" (p. 434). Certainly awareness of appropriate behavior without corresponding action would decrease one's confidence in herself. The typical anorexic or bulimic is often described as being from a middle or upper middle class family with high expectations for their daughter. Knowing how she is expected to relate with others in accordance with her affluent background could contribute additional pressure to a young woman. When she does not behave in accordance with the cultural interpersonal norms, her self-confidence would be expected to diminish.

Praise (PR)

Eating disorder inpatients scored significantly lower than the medical clinic group on this subscale. The Praise (PR) scale is an indicator of the individual's comfort in both giving and receiving praise. There is no prior empirical data or specific theoretical reference to comfort with praise in those with eating disorders. However, the data regarding families of those with eating disorders provides general support for the present findings. The families of anorexics are often described as critical of their daughters, which would seem to influence the young woman's discomfort in either giving or receiving praise. There are few studies evaluating the family environment of bulimics. Those studies that do exist find the families to be disengaged, chaotic, and highly conflicted. Their communication patterns are indirect and they are less supportive than more functional families (Johnson & Pure, 1986).

The present findings support the notion of cognitive distortions among bulimics, particularly as seen in the cognitive error of personalization. Johnson and Pure (1986) describe the bulimic as believing she is the center of everyone's attention.

This would seem to limit the bulimic's ability to notice and praise those around her. The bulimic is described as being "in a bind as any attention from another person is assumed to contain derogatory intent while the same is true of a lack of attention" (p. 437). A person in such a dilemma would surely not be able to accept praise.

Refusing Demands (RF)

The eating disorder inpatient group scored significantly lower than the medical clinic group in their willingness to say "no" to unreasonable or inconvenient demands from others. This finding is also supportive of some cognitive theories. Ellis' (1962) first irrational idea, the need for love and approval of all significant people, expresses one of the mistaken beliefs of many bulimics. This mistaken belief "interferes with a bulimic person's ability to assert her own desires for fear that this will anger or alienate others" (Johnson & Pure, 1986). She does not feel free to say no to the requests of another for fear that doing so would result in them not being happy with her, which she believes is essential.

This inability to say no to others may be related to the bulimic's difficulty in saying no to her own impulses to binge.

Aggressiveness

H_2 stated that there would be no significant difference among the eating disorder groups and the medical outpatients in aggression, as measured by the aggressiveness subscales of the IBS. This hypothesis was partially rejected because the inpatient eating disorder group scored higher on five of the seven aggressiveness scales. There was no significant difference between the two eating disorder groups, nor did the outpatient group differ from the medical clinic group when the Scheffe post hoc test was utilized.

General Aggressiveness, Rational (GGR)

On this subscale, which measures a broad range of aggressive behaviors, feelings, and attitudes, the inpatient group scored significantly higher than the medical clinic group.

Hostile Stance (HS)

The inpatients with eating disorders had higher scores than the comparison group on this subscale.

Hostile Stance measures an antagonistic orientation toward others. There is no prior research to date which explores the level of hostility of individuals with eating disorders. A related study by Norman and Herzog (1983) found that bulimic's scores on the psychopathic deviance scale of the MMPI tended to be elevated. High scorers on this scale tend to be very hostile and aggressive. Those involved with the treatment of eating disorder patients often report an intensity of anger and hostility in their patients. This study's findings support Kagan & Squires (1984) suggestion that therapeutic interventions deal with the issue of hostility.

Expression of Anger (EA)

Eating disorder inpatients indicate that they tend to lose their temper and express anger in a direct, forceful manner. These findings seem to contradict theories that view individuals with eating disorders as having difficulty in expressing their anger directly. Cauwels (1983) and Mintz (1985) each view bingeing as the mode chosen by bulimics to discharge their anger. In support of this view, Cauwels cites a study by Johnson which found that bulimics were less angry and more alert after a purge

was completed, but not before (Cauwels, 1983). In contrast, anorexics are often described as being full of rage and anger, but not able to express their feelings.

One explanation for the present findings may be that those with eating disorders do feel intense anger, but when they attempt to express it, the manifestation of their anger is inappropriate, such as in losing their temper. They may eventually learn to express anger in one of two ways: through their eating behavior or through outbursts of anger.

Disregard for Rights (DR)

On this scale the inpatients with eating disorders scored significantly higher than the medical clinic group in their tendency to ignore the rights of others in order to protect themselves or to gain an advantage. These results are surprising considering the number of authors who view bulimics as being "perfectionistic, accommodating, people pleasers." The inpatients in this sample may have reached a point in life or in their illness where they are reacting against the other-centered life they have been living.

Perhaps after years of pleasing others they are now focusing on their own rights, to the detriment of others' rights.

Passive Aggressiveness (PA)

Inpatients with eating disorders evidenced more indirect or passive expressions of aggressiveness than did the medical patient group. Examples of such behaviors include stubbornness, negativism, procrastination, and complaining. This finding is supported by the theories which stress the importance of the family in the development of eating disorders. The studies that have explored the family environment of patients with eating disorders have found them to manifest indirect patterns of communication (Johnson & Pure, 1986). Often the communication style of such families results in individuals having difficulty identifying and expressing their feelings. Thus, the young woman who feels angry, but is not permitted to express her anger to her family, learns to express her aggressions in a passive manner, such as through her eating behavior.

Relationship Factors

H_3 stated that there would be no significant difference between the eating disorder groups and the medical outpatient group on the relationship scales of the IBS. This hypothesis was partially rejected as the inpatient eating disorder group was more dependent and more shy than the medical outpatient group. There was no significant difference between the eating disorder outpatient group and the medical patient group, nor between the two eating disorder groups. These findings will be discussed separately.

Difficulty in interpersonal relationships might be anticipated, as reports by other authors have suggested similar findings. Women with bulimia have been found to have psychosocial impairment similar to that found in acute depressives and schizophrenic outpatients (Johnson & Berndt, 1983; Norman & Herzog, 1984).

Dependency (DP)

Individuals who were inpatients with eating disorders report themselves as more dependent on others than the medical clinic group. This dependency is manifest by such behaviors as relying on others for

help in decision making, feelings of powerlessness and helplessness, fear of losing the support of others, and attention seeking.

Bulimic patients are often reported to complain of having low self-esteem, which includes feelings of helplessness, inadequacy, ineffectiveness, and self-doubt (Johnson & Larson, 1982). Those with eating disorders sometimes try to boost their self-esteem through their quest for thinness. However, as their eating behavior becomes more extreme, they withdraw increasingly and have less social reinforcement. Many bulimics overaccomodate to the needs of others and ignore their own needs in order to gain approval (Johnson & Pure, 1986). Perhaps the inpatients in this study may have even more exacerbated feelings of dependency, influenced in part by their hospitalization, which implies a greater severity to their problems than outpatient treatment.

Shyness (SH)

Eating disordered inpatients had significantly higher scores in shyness than the medical clinic patients. On the SH subscale of the IBS, shyness

denotes social introversion and more comfort in socializing with family members or a small circle of close friends than with large groups.

A consistently mentioned personality characteristic of those with bulimia is shyness, yet some literature seems contradictory. Bulimics are described as being impulsive, outgoing and sexually active (Casper, Eckert, Halmi, Goldberg, & Davis, 1980). Other authors describe bulimics as socially active but fearing rejection and preferring solitude (Levenkron, 1982). In an effort to research this discrepancy, Segal and Figley (1985) found a relationship between bulimia and private shyness or fear of rejection among college students. The present study lends further support to these findings, extending beyond the college population.

Existential Well-Being

H_4 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in existential well-being (EWB) as measured by the SWB Scale. This hypothesis was rejected as both the inpatient and outpatient eating disorder groups differed from the medical

patient group in EWB, utilizing the Scheffe post hoc test. The two eating disorder groups did not differ on this scale.

Although norms for the SWB Scale have not yet been established, a recent study reviewing 15 diverse groups' scores on the SWB subscales yields some useful data for comparison with the present findings (Bufford, Bentley, Newenhouse & Papania, 1986). The inpatients with eating disorders reported a lower sense of life purpose and satisfaction than any groups on which information on the EWB has thus far been collected. The group whose overall results were similar to those of the eating disorder inpatients include 25 non-religious sociopathic male convicts, who had a mean score of 40.70 and SD of 9.20. The outpatients with eating disorders were nearly equivalent to this group, with a mean score of 40.80 and a SD of 8.67.

The eating disorder inpatients also evidenced less existential well-being than a group of 41 chronic pain patients, whose average EWB score was 41.66, with a SD of 11.13 (Mullins, 1986). In comparison to another psychiatric group, consisting of 72 adult outpatients, the eating disorder inpatients

demonstrated less EWB, but the outpatients with eating disorders scored slightly higher in EWB. Frantz (1985) reported that adult outpatients in his study had a mean score of 39.63, with a standard deviation of 10.42.

Because the EWB scale measures life satisfaction and life purpose it is not surprising that those suffering from an eating disorder would exhibit low scores on this test. However, the extent of their dissatisfaction is surprising when compared with other groups, such as convicted sociopaths and those in chronic pain, who might be expected to have less of a sense of purpose or satisfaction. These findings suggest a high degree of malaise with life in general among those afflicted with eating disorders.

Religious Well-Being

H_5 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in religious well-being (RWB) as measured by the SWB Scale. This hypothesis was rejected as both eating disorder groups differed from

the medical patient group in RWB scores. The two eating disorder groups did not differ from each other on this scale.

In comparison to other populations for whom data on the SWB is available, the eating disorder groups obtained lower RWB scores than a group of chronic pain patients, whose mean score was 43.93, with a standard deviation of 10.89 (Mullins, 1986). Both eating disorder groups also evidenced lower RWB than a group of adult outpatients with a mean RWB of 47.33 and a standard deviation of 8.93 (Frantz, 1985). However, those with eating disorders exhibited higher RWB scores than a group of 25 sociopathic males and a group of 45 Unitarian church members (Bufford et al., 1986). RWB scores for the eating disorder patients are predictably lower than scores of a variety of groups from religious settings, such as seminary students and church members.

Spiritual Well-Being

H_6 stated that there would be no significant difference among the eating disorder groups and the medical outpatient group in spiritual well-being (SWB) as measured by the SWB Scale. This hypothesis was

rejected as both eating disorder groups differed from the medical outpatients in spiritual well-being. The two eating disorder groups did not differ significantly from each other on this scale.

The eating disorder inpatients scored lower on SWB than all groups for whom data is available, excepting a group of 25 male sociopaths, whose average score was 76.30, with a standard deviation of 16.30 (Bufford et al., 1986). Both inpatients and outpatients reported less SWB than a group of 45 Unitarian church members, whose average score was 82.81, with a standard deviation of 15.02. The eating disorder patients also exhibited a lower degree of SWB than a group of 41 chronic pain patients, who obtained a mean score of 85.34, with a standard deviation of 19.75 (Mullins, 1986). Another comparison group, that of 72 adult outpatients, also scored higher than the eating disorder group on the SWB, with a mean score of 86.65 and a standard deviation of 17.65.

Assertiveness and Spiritual Well-Being

H_7 stated that assertive behavior as measured by the IBS General Assertiveness, Rational scale (SGR) would be positively correlated with spiritual

well-being for individuals with eating disorders. This hypothesis was partially accepted, as the SGR scale was positively correlated with the SWB and EWB subscales for the inpatient eating disorder group. For the outpatient eating disorder group only EWB was positively correlated. For both eating disorder groups combined, only EWB was positively correlated with SGR.

Although predictions were not made regarding the correlations of the assertiveness subscales with SWB, some interesting observations can be made. For the inpatient eating disorder group, six of the eight assertiveness subscales (SGR, SC, DA, PR, RE, and RF) were positively correlated with EWB. These same six subscales correlated positively with EWB when the two eating disorders were combined. For the eating disorder outpatients four of the eight assertivness subscales (SGR, SC, PR, and RE) were positively correlated with EWB.

Only SGR and DA were positively correlated with SWB for the inpatients. For the combined groups SC, PR, and RE correlated positively with SWB, whereas for the outpatient group alone only PR yielded a positive

correlation with SWB. The only assertiveness subscale resulting in a significant correlation with RWB was a negative correlation with Initiating Assertiveness.

Although no hypotheses were developed regarding aggressiveness scores and SWB results, general aggressiveness (GGR) was negatively correlated with RWB, EWB, and SWB for both the outpatient eating disorder group and the combined groups. For the inpatients with eating disorders, both EWB and SWB were negatively correlated with GGR.

In contrast to the eating disorder groups, the medical outpatient group did evidence a positive correlation between SGR scores and both EWB and SWB. Results from several other studies have also demonstrated a positive correlation between assertiveness and spiritual well-being. Campbell (1983) reported that for hemodialysis patients assertiveness scores on the IBS were positively correlated with SWB. Similarly, in a study of chronic pain patients, Mullins (1986) found that SWB correlated positively with nearly all of the IBS assertiveness scales.

Results from the present study, in contrast to prior findings, suggest that generalizations about the

relationship between SWB and assertiveness cannot be made to all populations. While EWB, which indicates one's general life satisfaction, was related to general assertiveness among both groups of patients with eating disorders, the religious or spiritual component of one's well-being was related to assertiveness only for the inpatients.

A more in-depth look at the specific assertiveness scales on the IBS reveals some interesting findings. Self-confidence (SC) is positively correlated with EWB for both of the eating disorder groups. Defending assertiveness (DA), which involves standing up for one's rights is positively correlated with EWB for inpatients. Both Praise and Requesting Help were positively correlated with EWB for the outpatient group. Focus on improving these four interpersonal skills in therapeutic interventions with eating disorder patients might lead to an improved sense of purpose in life.

Influence of Demographic Factors

The first research question explored the influence of demographic variables on the IBS and SWB scores. Multiple regression analyses were performed

to assess the effects of age, education, income, marital status, and frequency of church attendance. Age was the only demographic factor which had a significant relationsip to the SGR and GGR subscales of the IBS. Frequency of church attendance was the only demographic variable which related to the SWB scores. The effects of these two demographic variables, however, raises questions about how comparable the eating disorder sample and the medical group are. This will be discussed more fully as a limitation of the study.

Implications for the Study

Implications for Eating Disorders Theory

Keeping in mind Garner and Garfinkel's (1985) warning that all conceptual and therapeutic models for eating disorders must be considered tentative and provisional at the present time, the findings of this study expand upon the knowledge of psychosocial theory of eating disorders.

This study provides the first empirical evidence, aside from data collected among college students, confirming the lack of assertiveness among patients

with eating disorders. While numerous theories and treatment approaches have assumed that those with eating disorders are lacking in skills in asserting themselves, there has been no prior evidence to document these assumptions.

The observation that those with eating disorders have a "relationship with food" seems to be supported by these findings, as these individuals have been seen to lack several interpersonal skills that would allow them to relate more effectively with people.

The purpose of this study was not to support or refute any particular theory of eating disorders, but to add to the body of research in this new field. The findings, however, are most consistent with a cognitive-behavioral approach. Interpersonal behavior deficits and accompanying mistaken beliefs about themselves are present in those with eating disorders, although these may not be the only factors contributing to the development and maintenance of the disorder.

Implications for Spirituality Issues

The spiritual needs of patients in psychiatric settings have long been ignored. This study has

provided evidence that patients with eating disorders exhibit a lower level of spiritual well-being than a comparison group of medical patients. When compared to other groups for whom spiritual well-being data is available, the eating disorder sample scores quite low. Addressing both the existential and religious issues in the lives of eating disorder clients is important in providing total care for these individuals.

The EWB scores of those with eating disorders were seen to be positively related to difficulty in behaving assertively toward others and negatively related to aggressive behavior. Improving either existential well-being or interpersonal relation skills may have a positive effect on improving the alternate factor.

The SWB Scale has been demonstrated to be a useful, easily administered tool to help in assessing the degree of severity of eating disorders. This instrument may potentially be useful in assisting with decisions regarding placement of inpatients or outpatients and with assessing the degree of general life satisfaction of patients before and after treatment.

Implications for Therapeutic Intervention for Eating Disorders

One of the goals of therapy with individuals with eating disorders needs to be an improvement in their interpersonal skills. The use of group therapy to provide practice in relating more assertively and less aggressively is one method for achieving this goal. Specific attention needs to be paid to the deficits of each group member to assist her in acquiring the skills she needs, while decreasing the problematic behaviors.

Use of the IBS to help identify specific problem areas would help in addressing the needs of each patient. In general, however, this study suggests an increase in assertiveness and decrease in aggressiveness, dependency and shyness as goals for eating disorder patients. Specific areas of assertiveness to include in therapy are improving self-confidence, giving and receiving praise, and refusing the demands of others.

Areas of aggressiveness on which to focus in therapy include a decrease in hostility, more appropriate expression of anger, increased regard for

the rights of others, and a decrease in passive aggressive behavior. Individuals with eating disorders need to be taught not to suppress their anger and hostility, but to handle it appropriately. Therapists who work with eating disordered women need to be careful not to inadvertantly increase the hostility of an already angry person. Taking care to avoid fostering excessive dependency, which undermines self-confidence and results in anger is a necessary precaution. With increased skills in relating with people, anorexics and bulimics should find interpersonal relationships more reinforcing than relationships with food.

Besides behavioral improvement in interpersonal skills, the belief systems of eating disorder patients needs to be challenged. One irrational belief of many women with eating disorder is their tendency to construe self-worth by idealized standards or by comparison with others. More specifically, their self-worth is often mistakenly rooted in cultural values about the importance of body weight and shape. An educational approach, providing information about such issues as body types, cultural influences on weight, and basic nutrition information are used in

many treatment programs. This information seems essential as an initial step in confronting the mistaken beliefs that many bulimic and anorexic individuals have.

Beyond improvement in interpersonal skills and irrational beliefs, treatment of eating disorders could be better facilitated by addressing the existential and spiritual issues facing the patient. To have a sense of existential well-being is "to know what to do and why, who (we) are, and where (we) belong in relationship to ultimate concerns" (Blaikie & Kelsen, 1979, p. 137). Therapy needs to have not just an affective, behavioral or cognitive focus, but should raised questions about spiritual and existential concerns which the patient may not otherwise face.

Limitations

There are several limitations in this descriptive, correlational study. First, the limited generalizability of the findings must be recognized. As the subjects were all Caucasian females in the northwestern U.S., generalizations to males, to other ethnic groups, or to other geographic regions must be

made with caution. Generalizations to other psychiatric populations will need to be made with care, as this is a unique population, including only individuals diagnosed with eating disorders.

A second limitation is the use of volunteers as subjects. There may be differences between those who cooperated and those who were unwilling to participate. Although one can only speculate about potential differences, it might be anticipated that those patients with eating disorders who did not cooperate would have more pathological scores (i.e., higher in passive aggressiveness and hostility) than those who were subjects.

A third limitation is that the data gathered does not allow discussion on the causality of assertive behavior and spiritual well-being for individuals with eating disorders. Fourth, the self-report nature of the instruments that were used lend themselves to perception bias and social desirability factors that may have influenced the results.

A fifth limitation is the difference in demographic factors between the eating disorder groups and the comparison group. The two groups differed in age and frequency of church attendance, which impacted

results on the IBS and SWB scales. The inpatient group was approximately 10 years younger than the eating disorder outpatients or the medical clinic group, which had an effect on IBS scores. The medical outpatients were more frequent church attenders than the eating disorder groups, which affected the SWB scores.

Directions for Future Research

This study is the first to utilize the IBS with eating disordered individuals. Prior studies of the assertiveness of those with eating disorders have been limited to college populations and have used less comprehensive instruments. The IBS has been demonstrated to be a more comprehensive measure of interpersonal behavior traits such as assertiveness and aggressiveness. Furthermore, the IBS is unique in its ability to distinguish between assertive and aggressive behaviors. The IBS has proven to be a valuable instrument for distinguishing some of the interpersonal deficits of eating disorder patients.

The IBS should prove to be useful in assessing assertiveness both before and after therapeutic intervention for eating disorders. Mauger and

Adkinson (1980) have indicated that the IBS was written in the present tense to allow using the IBS to measure change in assertive and aggressive behaviors. They report that studies have demonstrated its usefulness in asssessment of change after treatment with other populations.

An improvement in assertiveness scores would be one method of assessing improvement that would extend beyond a change in eating patterns to the area of actual behavior in interpersonal situations. It would be anticipated that as assertiveness skills improved, there would be a corresponding improvement in a sense of purpose in life, or existential well-being.

Future studies would hopefully control for a better matched group than the medical outpatient group in this study. In addition, research comparing anorexics and bulimics in assertiveness and aggressiveness would help to clarify what differences, if any exist, between these two disorders in interpersonal behavior traits.

In assessing the spiritual needs of patients with eating disorders, use of another instrument, in addition to the SWB Scale, would provide more extensive information. The brevity of the SWB makes

it easy to use in conjunction with instruments measuring other aspects of one's spirituality.

Beyond the areas of assertiveness and spiritual well-being among those with eating disorders, as explored in this project, further theoretical foundations must be established. This study has demonstrated the lack of assertiveness among those with eating disorders, and developed conclusions about the accompanying cognitive processes. However, investigation is still needed to explore the role of cognitive mechanisms in both the development and maintenance of eating disorders.

While an improvement in interpersonal relationship skills and related cognitions are suggested as ways to improve the coping abilities of eating disordered patients, it is not yet clear whether these skill deficits can be implicated in producing symptoms of eating disorders. Hollon and Beck (1979) have commented that "there need be no necessary congruence between the factors that trigger a disorder and the factors that alleviate it" (p. 155). Further research is recommended in both the theoretical and therapeutic implications of this study's findings.

Summary

The purpose of this study was twofold: to expand upon the literature relating to the interpersonal behavior skills of individuals with eating disorders and to explore the levels of assertiveness and spiritual well-being among these patients.

The IBS has proven to be a valuable tool in assessing the levels of assertiveness and aggressiveness of eating disorder patients. This instrument has the unique distinction of being able to distinguish between assertive and aggressive behaviors.

The results indicated that individuals with eating disorders have deficiencies in several specific interpersonal skills. They were found to score higher in aggressiveness and lower in assertiveness than a comparison group of non-eating disordered medical patients. These findings support theoretical and observational reports of a deficit in assertiveness in eating disorder clients. Furthermore, this study expands beyond prior studies with college students and uses a more comprehensive instrument, the Interpersonal Behavior Survey.

Individuals with eating disorders were found to have lower scores in spiritual and existential well-being than nearly any other group for whom data has been collected. A positive relationship was found between existential well-being scores and assertiveness and a negative relationship between EWB and SWB scores and aggressiveness.

This study has contributed to the growing body of knowledge indicating the relationship between spiritual and psychological health. Addressing the spiritual needs of those with eating disorders should have an impact on their psychological well-being.

REFERENCES

Agnor, D. W. (1986). Christian and non-religious sociopaths compared: Self-concept, locus of control, guilt, and quality of religious experience. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Alberti, R. E. & Emmons, M. L. (1970). Your perfect right (3rd ed.). San Louis Obispo, CA: Impact Press.

Allport, G. W. & Ross, J. M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5, 432-443.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.

Andersen, A. E. (1985). Practical comprehensive treatment of anorexia nervosa and bulimia. Baltimore, MD: Johns Hopkins University Press.

Augsberger, D. (1979). Anger and assertiveness in pastoral care. Philadelphia: Fortress Press.

Baird, P. & Sights, J. R. (1986). Low self-esteem as a treatment issue in the psychocherapy of anorexia and bulimia. Journal of Counseling and Development, 64, 449-451.

Beumont, P. J. V., George, G. C. W., & Smart, D. E. (1976). "Dieters" and "vomiters and purgers" in anorexia nervosa. Psychological Medicine, 6, 617-622.

Blaikie, N. W. & Kelsen, G. P. (1979). Locating self and giving meaning to existence: A typology of paths to spiritual well-being based on new religious movements in Australia. In D. O. Moberg (Ed.). Spiritual well-Being: Sociological perspectives. Washington, DC: University Press of America.

Bloom, L. Z., Coburn, K., & Pearlman, J. (1975). The new assertive woman. New York: Delacorte.

Boskind-Lodahl, M. (1976). Cinderella's stepsisters: A feminist perspective on anorexia nervosa and bulimia. Signs: The Journal of Women in Culture and Society, 2, 342-356.

Boskind-Lodahl, M. & White, W. C. (1978). The definition and treatment of bulimarexia in college women-- a pilot study. Journal of the American College Health Association, 2, 27-29.

Boskind-White, M. & White, W. C., Jr. (1983). Bulimarexia: The binge/purge cycle. New York: W. W. Norton.

Bruch, H. (1973). Eating disorders. New York: Basic Books.

Bruch, H. (1978). The golden cage: The enigma of anorexia nervosa. New York: Vintage Books.

Bruch, H. (1983). Psychotherapy in anorexia nervosa and developmental obesity. In R. K. Goodstein, (Ed.), Eating and weight disorders (pp. 134-146). New York: Springer.

Bruch, H. (1985). Four decades of eating disorders. In D. M. Garner & P. E. Garfinkel (Eds.) Handbook of psychotherapy for anorexia nervosa and bulimia. New York: Guilford, pp. 7-18.

Bufford, R. K. (1981a). Assertiveness: Recognizing the limits. The Bulletin of the Christian Association for Psychological Studies, 7, 1-3.

Bufford, R. K. (1981b). The human reflex. San Francisco: Harper and Row.

Bufford, R. K. (1984). Empirical correlates of spiritual well-being and spiritual maturity scales. Presented at the Christian Association for Psychological Studies annual meeting, Dallas, 1984.

Bufford, R. K., Bentley, R. H., Newenhouse, J. M., & Papania, A. J. (1986). The relationship among groups using the Spiritual Well-Being Scale. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.

Bufford, R. K. & Parker, T. G. (1985, August). Religion and well-being: Concurrent validation of the Spiritual Well-Being Scale. Presented at the annual meeting of the American Psychological Association, Los Angeles.

Butler, P. (1976). Self-assertion for women: A guide to becoming androgynous. San Francisco: Canfield.

Campbell, A. (1981). The sense of well-being in America: Recent patterns and trends. New York: McGraw Hill.

Campbell, A., Converse, P. E., & Rondgers, W. L. (1976). The quality of American life. New York: Russell Sage Foundation.

Campbell, C. D. (1983). Coping with hemodialysis: cognitive appraisals, coping behaviors, spiritual well-being, assertiveness, and family adaptability and cohesion as correlates of adjustment. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Campbell, D. T. & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Boston: Houghton Mifflin.

Campise, R., Ellison, C. W., & Kinsman, R. (1979, September). Spiritual well-being: Some exploratory relationships. Paper presented as part of the symposium, Spiritual well-being, loneliness, and perceived quality of life, at the annual meeting of the American Psychological Association, New York City.

Cantelon, L. J., Leichner, P. P. & Harper, D. W. (1986). Sex-role conflict in women with eating disorders. International Journal of Eating Disorders, 5, 317-323.

Casper, R. C., Eckert, E. D., Halmi, K. A., Goldberg, S. C., & Davis, J. M. (1980). Bulimia: Its incidence and clinical importance in patients with anorexia nervosa. Archives of General Psychiatry, 37, 1030-1035.

Cauwels, J. M. (1983). Bulimia: The binge-purge compulsion. New York: Doubleday.

Cerling, C. E. (1980). Holy boldness. Chappaqua, NY: Christian Herald Books.

Cheek, D. K. (1976). Assertive black...puzzled white. San Luis Obispo, CA: Impact.

Chenevert, M. (1978). Special techniques for women in the health professions. St. Louis: Mosby.

Clark, C. C. (1978). Assertive skills for nurses. Wakefield, MA: Contemporary.

Crumbaugh, J. & Maholick, L. (1969). The purpose in life test. Munster, Indiana: Psychometric Affiliates.

Dawley, H. T. & Wennrich, W. W. (1976). Achieving assertive behavior: A guide to assertive training. Monterey, CA: Brooks-Cole.

DeGiovanni, I. S. & Epstein, N. (1978). Unbinding assertion and aggression in research and clinical practice. Behavior Modification, 2, 173-192.

Dunn, P. K. & Ondercin, P. (1981). Personality variables related to compulsive eating in college women. Journal of Clinical Psychology, 37, 43-49.

Eichenbaum, L. & Orbach, S. (1983). What do women want?: Exploding the myth of dependency. New York: Coward McCann.

Ellis, A. (1962). Reason and emotion in psychotherapy. New York: Lyle Stuart.

Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, 11, 330-340.

Ellison, C. W. & Cole, K. (1982). Religious commitment, television viewing, values and quality of life. Journal of Psychology and Christianity, 1, 21-32.

Ellison, C. W. & Economos, T. (1981, April). Religious orientation and quality of life. Presented at the annual meeting of the Christian Association for Psychological Studies, San Diego.

Ellison, C. & Paloutzian, R. F. (1979). Religious experience and quality of life. In R. F. Paloutzian (Chair), Spiritual well-being, loneliness, and perceived quality of life. Symposium presented at the annual meeting of the American Psychological Association, New York.

Ellison, C. W. & Paloutzian, R. F. (1978, August). Assessing quality of life: Spiritual well-being and loneliness. Paper presented at the meeting of the American Psychological Association, Toronto.

Emmons, M. & Richardson, D. (1981). The Assertive Christian. Minneapolis: Winston Press.

Faul, J. C. & Augsberger, D. (1980). Beyond assertiveness. Waco, TX: Word Books.

Frantz, J. L. (1985). MMPI and DSM III diagnosis related to selected measures of religious and demographic variables in adult outpatients. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Galassi, J. P., Delo, J. S., Galassi, M. D., & Bastien, S. (1974). The College Self-Expression Scale: A measure of assertiveness. Behavior Therapy, 5, 165-171.

Galassi, M. D. & Galassi, J. P. (1978). Assertion: A critical review. Psychotherapy: Theory, research and practice, 15, 16-29.

Gallup, G., Jr. (1980). Religion in America 1979-1980. Princeton, NJ: The Princeton Religion Research Center.

Garfinkel, P. E. & Garner, D. M. (1982). Anorexia nervosa: A multi-dimensional perspective. New York: Brunner/Mazel.

Garfinkel, P. E., Moldofsky, H., & Garner, D. M. (1980). The heterogeneity of anorexia nervosa: Bulimia as a distinct subgroup. Archives of General Psychiatry, 37, 43-49.

Garner, D. M. & Garfinkel, P. E. (1985). Handbook of psychotherapy for anorexia and bulimia. New York: Guilford.

Garner, D. M., Garfinkel, P. E., & O'Shaughnessy, M. (1985). The validity of the distinction between bulimia with and without anorexia nervosa. American Journal of Psychiatry, 142, 581-587.

Garner, D. M., Garfinkel, P. E., & Schwartz, D. (1980). Cultural expectations of thinness in women. Psychological Reports, 47, 483-491.

Goodsitt, A. (1985). Self psychology and the treatment of anorexia nervosa. In D. M. Garner & P. E. Garfield (Eds.). Handbook of psychotherapy for anorexia nervosa and bulimia. New York: Guilford, pp. 55-81.

Green, R. S. & Rau, J. H. (1974). Treatment of compulsive eating disturbances with anti-convulsant medication. American Journal of Psychiatry, 131, 428-432.

Greenberg, B. R. (1986). Predictors of binge eating in bulimic and nonbulimic women. International Journal of Eating Disorders, 5, 269-284.

Halmi, K. A., Falk, J. R., & Schwartz, E. (1981). Binge eating and vomiting: A survey of a college population. Psychological Medicine, 11, 697-706.

Hart, K. J. & Ollendic, T. H. (1985). Prevalence of bulimia in working and university women. American Journal of Psychiatry, 142, 851-854.

Hawkins, D. B. (1986). Interpersonal behavior traits, spiritual well-being and their relationship to blood pressure. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Hawkins, R. C. & Clement, P. F. (1980). Development and construct validation of a self-report measure of binge eating tendencies. Addictive Behavior, 5, 219-226.

Heilbrun, A. B. & Bloomfield, D. L. (1986). Cognitive differences between bulimic and anorexic females: self-control deficits in bulimia. International Journal of Eating Disorders, 5, 209-222.

Herzog, D. B., Pepose, M., Norman, D. K., & Rogotti, N. A. (1985). Eating disorders and social maladjustment in female medical students. The Journal of Nervous and Mental Disease, 173, 734-737.

Hollon, S. D. & Beck, A. T. (1979). Cognitive therapy for depression. In P. C. Kendell & S. D. Hollon (Eds.), Cognitive-behavioral interventions: Theory, research and procedures. New York: Academic Press, pp. 153-204.

Hsu, L. (1980). Outcome of anorexia nervosa: A review of the literature (1954 to 1978). Archives of General Psychiatry, 37, 1041-1046.

Irwin, T. (1978). A theological study of assertion and assertiveness training. CAPS Bulletin,4, 8-14.

Jakubowski, P. & Lange, A. J. (1978). The assertive option: Your rights and responsibilities. Champaign, IL: Research Press.

Johnson, C. & Berndt, D. J. (1983). Bulimia and life adjustment: A preliminary investigation. American Journal of Psychiatry, 140, 774-777.

Johnson, C. & Pure, D. L. (1986). Assessment of bulimia: A multidimensional model. In K. D. Brownell & J. P. Foreyt (Eds.), Handbook of Eating Disorders (pp. 405-449). New York: Basic Books.

Johnson, C. L., Stuckey, M. K., Lewis, L. D., & Schwartz, D. M. (1982). Bulimia: A descriptive survey of 316 cases. International Journal of Eating Disorders, 2(1), 3-16.

Johnson, C. & Larson, R. (1982). Bulimia: An analysis of moods and behavior. Psychosomatic Medicine, 44, 341-351.

Jones, S. L. (1984). Assertiveness training in Christian perspective. Journal of Psychology and Theology, 12(2), 91-99.

Jones, D. (1981). Structural discontinuity and the development of anorexia nervosa. Sociological Focus, 14(3), 233-245.

Kagan, D. M. & Squires, R. L. (1984). Compulsive eating, dieting, stress, and hostility among college students. Journal of College Student Personnel, 25, 213-220.

Katzman, M. A., Wolchik, S. A., & Braver, S. L. (1984). The prevalence of frequent binge eating and bulimia in a nonclinical college sample. International Journal of Eating Disorders, 3(3), 53-62.

Kinoy, B. P. (1984). When will we laugh again? New York: Columbia University.

Kohut, H. (1971). The analysis of the self. New York: International Universities.

Lacey, J. H., Coker, S., & Birtchnell, S. A. (1986). Bulimia: Factors associated with its etiology and maintenance. International Journal of Eating Disorders, 5, 475-487.

Lazarus, A. A. (1966). Behavior reversal vs. non-directive vs. advice in effecting behavior change. Behavior Research and Therapy, 4, 209-212.

Lazarus, A. A. (1973). On assertive behavior: A brief note. Behavior Therapy,4, 697-699.

Levenkron, S. (1982). Treating and overcoming anorexia nervosa. New York: Warner Books.

Mauger, P. A. & Adkinson, D. R. (1980). The interpersonal behavior survey manual. Atlanta: Georgia State University.

Mauger, P. A., Simpson, D., & Adkinson, D. R. (1979, August). The Assertiveness and Aggressiveness of Affirming Christians Versus Non-religious Persons. Presented at the Convention of the American Psychological Association, New York.

McAllister, E. W. C. (1975). Assertive training and the Christian therapist. Journal of Psychology and Theology, 3, 19-24.

McCanne, L. P. F. (1985). Correlates of bulimia in college students: Anxiety, assertiveness, and locus of control. Journal of College Student Personnel, 26, 306-310.

Merkel, G. (1979). Parents are to be seen and heard: Assertiveness in educational planning for handicapped children. San Luis Obispo, CA: Impact.

Mintz, I. L. (1985). Psychoanalytic description: The clinical picture of anorexia nervosa and bulimia. In C. P. Wilson, C. C. Hogan, & I. L. Mintz (Eds.), Fear of being fat (pp. 83-113). New York: Aronson.

Minuchin, S., Rosman, B. L., & Baker, L. (1978). Psychosomatic families: Anorexia nervosa in context. Cambridge, MA: Harvard University Press.

Mitchell, J. E. & Pyle, R. L. (1985). Characteristics of bulimia. In J. E. Mitchell (Ed.), Anorexia nervosa and bulimia (pp. 29-47). Minneapolis: University of Minnesota.

Moberg, D. O. (1978). Spiritual well-being: A challenge for interdisciplinary research. Journal of the American Affiliation, 30(2), p. 67-72.

Moberg, D. O. (1985, July). Spirituality and science: The progress, problems, and promise of scientific research on spiritual well-being. Paper presented at the Conference on Christian Faith and Science in Society, Oxford, England.

Moberg, D. O. & Brusek, P. M. (1978). Spiritual well-being: A neglected subject in quality of life research. Social Indicators Research, 5, 303-323.

Moy, A. C. (1980). Assertive behavior in a new testament perspective. Journal of Psychology and Theology, 8(4), 288-292.

Mueller, E. E. (1986). The relationship betweeen religious beliefs/attitudes and psychopathology in an evangelical seminary sample. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Mullins, W. H. (1986). Chronic Pain: A study of treatment outcome as it relates to coping behaviors, assertiveness, spiritual well-being, and MMPI scores. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Neuman, P. A. & Halvorson, P. A. (1983). Anorexia nervosa and bulimia: A handbook for counselors and therapists. New York: Van Nostrand Reinhold.

Norman, D. K. & Herzog, D. B. (1983). Bulimia, anorexia nervosa, and anorexia nervosa with bulimia: A comparative analysis of MMPI profiles. International Journal of Eating Disorders, 2, 43-52.

Norman, D. K. & Herzog, D. B. (1984). Persistent social maladjustment in bulimia: A one year follow-up. American Journal of Psychiatry, 141, 444-446.

Ondercin, P. A. (1979). Compulsive eating in college women. Journal of College Student Personnel, 20, 153-157.

Orbach, S. (1985). Accepting the symptom: A feminist psychoanalytic treatment of anorexia nervosa. In D. M. Garner & P. E. Garfinkel (Eds.) Handbook of psychotherapy for anorexia nervosa and bulimia. New York: Guilford Press, pp. 83-104.

Otto, P. S. (1983). Christianity and assertiveness: Response of adults in two evangelical churches to assertive behavior. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Palazzoli, M. S. (1978). Self-starvation. New York: Jason Aronson.

Paloutzian, R. F. & Ellison, C. W. (1982). Loneliness, spiritual well-being, and quality of life. In L. A. Peplau & D. Perlman, (Eds.), Loneliness: A sourcebook of current theory, research, and therapy. New York: Wiley Inter-science.

Paloutzian, R. F. & Ellison, C. W. (1979a, April) Loneliness and spiritual well-being as functions of living environments and professional status in adult women. Paper presented at the annual meeting of the Western Psychological Association, San Diego.

Paloutzian, R. F. & Ellison, C. W. (1979b, April). Religious commitment, loneliness, and quality of life. Paper presented at the annual meeting of the Christian Association for Psychological Studies, Minneapolis.

Pope, H. G. & Hudson, J. I. (1984). New hope for binge eaters. New York: Harper and Row.

Pope, H. G., Hudson, J. I., Yergelun-Todd, D. (1984). Anorexia nervosa and bulimia among 300 suburban women shoppers. American Journal of Psychiatry, 141, 292-294.

Pope, H. G., Hudson, J. I., Yergelun-Todd, D., & Hudson, M. S. (1984). Prevalence of anorexia nervosa and bulimia in three student populations.

International Journal of Eating Disorders, 3(3), 45-51.

Pyle, R. L., Halvorson, P. A., & Goff, G. M. (1986). The successful maintenance of treatment gains for bulimic clients. Journal of Counseling and Development, 64, 445-448.

Pyle, R. L., Mitchell, J. E., & Eckert, E. D. (1981). Bulimia: A report of 34 cases. Journal of Clinical Psychiatry, 42, 60-64.

Pyle, R. L., Mitchell, J. E., Eckert, E. D., Halvorson, P. A., Neuman, P. A. & Goff, G. M. (1983). The incidence of bulimia in freshmen students. International Journal of Eating Disorders,2, 75-85.

Quinn, J. B. (1983). The relationships between religiosity and marital satisfaction: Correlations among the Religious Orientation Scale, Spiritual Well-being Scale, and the Marital Satisfaction Scale. Unpublished doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR.

Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. Behavior Therapy, 4, 398-406.

Rimm, D. & Masters, J. (1979). Behavior therapy. New York: Academic Press.

Rimm, D. C. & Masters, J. C. (1974). Behavior therapy: Techniques and empirical findings. New York: Academic Press.

Rosen, T. C. & Leitenberg, H. (1982). Bulimia nervosa: Treatment with exposure and response prevention. Behavior Therapy, 13, 117-124.

Russell, G. (1979). Bulimia nervosa: An ominous variant of anorexia nervosa. Psychological Medicine, 9, 429-448.

Russell, D., Peplau, L. A., & Ferguson, L. (1978). Developing a measure of loneliness. Journal of Personality Assessment, 42, 290-294.

Salter, A. (1949). Conditioned reflex therapy. New York: Farrar, Strauss.

Sanders, R. K. (1976). The effectiveness of a theologically oriented approach to assertive training for refusal behaviors. (Master's Thesis, S. F. Austin State University, 1976). Masters Abstracts, 14, 252. (University Microfilms, No. 13-08786).

Sanders, R. K. (1980). Assertiveness training among a Christian population. Dissertation Abstracts International, 41, (6-B), 2345.

Sanders, R. K. & Malony, H. N. (1982). A theological and psychological rationale for assertiveness training. Journal of Psychology and Theology, 10 (3), 251-255.

Scanzoni, J. (1976). Assertiveness for Christian women. Christianity Today, 20, 16-18.

Segal, S. A. & Figley, C. R. (1985). Bulimia: Estimate of incidence and relationship to shyness. Journal of College Student Personnel, 26, 306-310.

Shatford, L. A. & Evans, D. R. (1986). Bulimia as a manifestation of the stress process: A LISREL causal modeling analysis. International Journal of Eating Disorders, 5, 451-473.

Sitnick, T. & Katz, J. (1984). A sex role identity and anorexia nervosa. International Journal of Eating Disorders, 3, 81-87.

Slade, P. D. & Dewey, M. E. (1986). Development and preliminary validation of SCANS: A screening instrument for identifying individuals at risk of developing anorexia and bulimia nervosa. International Journal of Eating Disorders, 5, 517-538.

Smith, M. J. (1975). When I say no, I feel guilty. New York: Bantam Books.

Stoudenmire, J. (1978). Jesus and assertiveness. Journal of Religion and Health, 17, 75-79.

Strober, M. (1984). Stressful life events associated with bulimia in anorexia nervosa. International Journal of Eating Disorders, 3(2), 3-16.

Swenson, G., Brady, T., & Edwards, K. (1978). The effects of attitude pretraining on assertion training with Christian college students. CAPS Bulletin, 4, 14-17.

Taetzsch, L. & Benson, E. (1978). Taking charge: On the job techniques for assertive management. Chicago: Nelson-Hall.

Thompson, M. G. & Schwartz, D. M. (1980). Life adjustment of women with anorexia nervosa and anorexic-like behavior. International Journal of Eating Disorders, 1, 47-60.

Trends: Another poll: Groundswell? (1983, October 14). Evangelical Newsletter, 10(10), p. 1.

Weiss, L., Katzman, M., & Wolchik, S. (1985). Treating bulimia: A psychoeducational approach. New York: Pergamon.

White, W. C. & Boskind-White, M. (1981). An experiential-behavioral approach to the treatment

of bulimarexia. Psychotherapy: Theory, Research and Treatment, 18, 501-507.

Wolpe, J. E. (1973). The practice of behavior therapy. New York: Pergamon.

Wolpe, J. (1958). Psychotherapy by reciprocal inhibition. Stanford, CA: Stanford University.

APPENDICES

PAGE

APPENDIX A

Eating Disorder Patients: Agreement to Participate in Research Study

AGREEMENT TO PARTICIPATE IN RESEARCH STUDY

I agree as a patient of the Eating Disorder's inpatient or outpatient program to participate as a volunteer in a scientific investigation as an authorized part of the research programs of Portland Adventist Medical Center and Western Conservative Baptist Seminary.

My involvement in this study will be to complete a background information sheet and three personal assessment inventories. Completion of these items will take approximately one hour.

I understand that although the results of this study may be published, my name will not be used and I will not be identifiable from the results in any way. I further understand that my role in this study is completely confidential and in no way will affect my status or treatment in the Eating Disorder's program.

I understand that I am free to withdraw my consent and terminate my participation in this study at any time and hereby authorize that my files at the Eating Disorder's program may also be used as part of this research study.

_____ _____

Date Signature, research participant

NOTICE TO PARTICIPANTS

In exchange for your participation in this research project, we agree to administer and score the research questionnaires free of charge and to make the results available for use in your treatment at PAMC.

Rodger K. Bufford, Ph.D.

APPENDIX B

Eating Disorder Patients:

Background Information

ID_____

BACKGROUND INFORMATION

1. AGE: _____

2. SEX: _____Male _____Female

3. EDUCATION: show highest level completed

_____ Grades 1-12 (specify highest grade)
_____ College (specify number of years)
_____ Post college (specify number of years)

4. GROSS FAMILY INCOME:

_____ Less than $5,000 per year
_____ $5,000 to $9,999 per year
_____ $10,000 to $14,999 per year
_____ $15,000 to $19,999 per year
_____ $20,000 to $29,999 per year
_____ $30,000 to $39,999 per year
_____ $40,000 to $59,999 per year
_____ $60,000 or more per year

5. MARITAL STATUS: Indicate which of the following best describes your current living situation.

_____ Never married
_____ Married
_____ Divorced
_____ Widowed
_____ Separated
_____ Living together

6. At what age did you begin to mature sexually (women indicate age of first menstrual cycle; men indicate age of beginning to shave):

_____ Years old

7. Rate your current attitude regarding intercourse on the following scale

Dislike intensely 1 2 3 4 5 6 7 Enjoy greatly

8. At what age did you first experience sexual intercourse?

_____ Years _____ Does not apply/never

9. What is your current frequency of sexual intercourse?

_____ none
_____ less than once/month
_____ 1 to 3 times/month
_____ once/week
_____ 2 to 3 times/week
_____ 4 to 7 times/week
_____ more than 7 times/week

10. Have you ever had a sexually-transmitted disease?

_____ Yes _____ No

11. Have you ever been involved in a sexual relationship with a member of the same sex?

_____ Yes _____ No

12. Have you ever experienced sexual involvement with members of your immediate family (eg. biological or step parents, brothers or sisters) or members of your extended family (grandparents, uncles, cousins, etcetera)?

Never					Many times	
1	2	3	4	5	6	7

If you have experienced sexual involvement with family members:

A. How many times did such involvement occur?

_____ once or twice
_____ three to five times
_____ more than five times

B. What was your age during the period when this occurred?

from _____ years to _____ years

13. FREQUENCY OF ATTENDANCE: Church or synagogue

_____ Less than once/year
_____ Once or twice/year
_____ 3 - 11 times/year
_____ 1-3 times/month
_____ Weekly
_____ More than once/week

14. PERSONAL RELIGIOUS DEVOTIONS: Average Frequency

_____ Not at all
_____ Less than once/week
_____ Weekly
_____ 1-3 times/week
_____ 4-7 times/week
_____ more than once/day

15. Do you profess to be a Christian? (Mark response which best describes you):

_____ No
_____ Yes, I respect and attempt to follow the moral and ethical teachings of Christ.
_____ Yes, I have received Jesus Christ into my life as my personal Savior and Lord.
_____ Yes, I have received Jesus Christ as my personal Savior and Lord and I seek to follow the moral and ethical teachings of Christ.

If yes, _____ number of years you have been a professing Christian

For each of the following circle the number which best describes you:

16. Importance of religion:

No importance have no religion	1 2 3 4 5 6 7	Extremely important; religious faith is the center of my life

17. Religious knowledge and development:

Limited; need help & instruction from others	1 2 3 4 5 6 7	Extensive; able to help and instruct others

APPENDIX C

Medical Outpatients:

Consent Form

CONSENT FORM

You are being asked to participate in a study of the relationship between interpersonal behavior traits and various measures of health. It will take approximately 45 minutes of your time, part of which can be done while waiting to see your physician. The remainder may be completed at home and returned to us in a stamped envelope which has been provided for you.

Your part in this important study is to answer the demographic questionnaire, a personal well-being scale, and an interpersonal behavior survey. Additionally, the staff will measure and record your blood pressure, height, weight and wrist size. In return for your participation, we will be happy to give you the general results of the study, and/or specific feedback on your particular interpersonal behavior traits. Please read carefully the paragraph below before signing.

I agree to answer the questions provided and have my blood pressure, height, weight and wrist size taken by the clinic staff. I understand that my name will not be used and that information I provide will be used only for research purposes. I further understand that I may see a summary of the study results at this office when available.

Signed_____

Date_____

ID#_____

Name_____

Address_____

_____

Phone # (s)_____

Interested in: (please check if appropriate)

____general results of study

____specific results of my interpersonal behavior traits

APPENDIX D

Medical Outpatients:

Background Information

I.D.#_____

BACKGROUND INFORMATION

1. Age: _____

2. Sex: _____ Male_____Female

3. Marital Status: ___Single ___Married

___Divorced ___Widowed

4. # of previous marriages____

5. Education _____(number of years of formal education)

6. Occupation(please check one):

____Professional, Technical & Managerial occupations

____Clerical & Sales occupations (e.g.. bookkeeper,sec'y.)

____Processing occupations (e.g. ore refining)

____Machine Trades occupations (e.g. mechanic, millwright)

____Benchwork occupations (e.g. radio repair)

____Structural work occupations (e.g. painter, carpenter)

____Service occupations (e.g. housework, cook)

____Agriculture, Fishery, Forestry & related occupations

Miscellaneous occupations:

____(e.g. truck driver, bus driver)

____None

7. Number of hours worked per week: _____

8. Annual family income:

_____ less than $5,000 per year
_____ $5,000-$9,999 per year
_____ $10,000-$14,999 per year
_____ $15,000-$19,999 per year
_____ $20,000-$29,999 per year
_____ $30,000-$49,999 per year
_____ $50,000 or more per year

9. Church affiliation:

_____ Catholic
_____ Jew
_____ Protestant-specify denomination:

_____

_____ Other:_____
_____ None

10. Frequency of church attendance:

_____ less than one time per year
_____ once or twice per year
_____ between 3 and 12 times per year
_____ between 1/month and 1/week
_____ weekly
_____ more than once/week
_____ not at all

11. Health History:

Height _____ Weight_____ Wrist size _____

Blood pressure_____

Presently treated for high blood pressure?_____

APPENDIX E

Spiritual Well-Being Scale

SPIRITUAL WELL-BEING SCALE

For each of the following statements circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience:

SA = strongly agree A = agree MD = moderately disagree
MA = moderately agree D = disagree SD = strongly disagree

1. I don't find much satisfaction in private prayer with God. SA MA A D MD SD
2. I don't know who I am, where I came from, or where I'm going. SA MA A D MD SD
3. I believe that God loves me and cares about me. SA MA A D MD SD
4. I feel that life is a positive experience. SA MA A D MD SD
5. I believe that God is impersonal and not interested in my daily situations. SA MA A D MD SD
6. I feel unsettled about my future. SA MA A D MD SD
7. I have a personally meaningful relationship with God. SA MA A D MD SD
8. I feel very fulfilled and satisfied with life. SA MA A D MD SD
9. I don't get much personal strength and support from my God. SA MA A D MD SD
10. I feel a sense of well-being about the direction my life is headed in. SA MA A D MD SD
11. I believe that God is concerned about my problems. SA MA A D MD SD
12. I don't enjoy much about life. SA MA A D MD SD
13. I don't have a personally satisfying relationship with God. SA MA A D MD SD
14. I feel good about my future. SA MA A D MD SD
15. My relationship with God helps me not to feel lonely. SA MA A D MD SD
16. I feel that life is full of conflict and unhappiness. SA MA A D MD SD
17. I feel most fulfilled when I'm in close communion with God. SA MA A D MD SD
18. Life doesn't have much meaning. SA MA A D MD SD
19. My relation with God contributes to my sense of well-being. SA MA A D MD SD
20. I believe there is some real purpose for my life. SA MA A D MD SD

APPENDIX F

Raw Data

RAW DATA

Key of Raw Data by Columns

1 = Subject
2 = Patient Status
3 = Age
4 = Education
5 = Income
6 = Marital Status
7 = Frequency of Church Attendance
8 = Religious Well-Being
9 = Existential Well-Being
10 = Spiritual Well-Being
11 = IBS Denial (T-Scores)
12 = IBS Infrequency
13 = IBS Impression Management
14 = IBS General Aggression
15 = IBS Hostile Stance
16 = IBS Expression of Anger
17 = IBS Disregard of Rights
18 = IBS Verbal Aggression
19 = IBS Physical Aggression
20 = IBS Passive Aggression
21 = IBS General Assertiveness
22 = IBS Self-Confidence
23 = IBS Initiating Assertiveness
24 = IBS Defending Assertiveness
25 = IBS Frankness
26 = IBS Praise
27 = IBS Requesting Help
28 = IBS Refusing Demands
29 = IBS Conflict Avoidance
30 = IBS Dependency
31 = IBS Shyness

DATA FILE

```
DATA LIST FILE =  'DEBI.DAT'/ ID 1-3 STAT 5 AGE 7-8
ED 10-11 INCOME 13 MARSTA 15 FREQATT 17 RWB 19-20
EWB 22-23 SWB 25-27 DE 29-30 IF 32-33 IM 35-36
GGR 38-39 HS 41-42 EA 44-45 DR 47-48 VE 50-51 PH 53-54
PA 56-57 SGR 59-60 SC 62-63 IA 65-66 DA 68-69 FR 71-72
PR 74-75 RE 77-78 RF 80-81 CA 83-84 DP 86-87 SH 89-90.


VARIABLE LABELS STAT 'PATIENT STATUS'
/ INCOME 'GROSS FAMILY INCOME'
/ MARSTA 'MARITAL STATUS'
/ FREQATT 'FREQUENCY OF ATTENDING CHURCH'.


VALUE LABELS STAT 1 'E. D. INPATIENT'
2 'E. D. OUTPATIENT' 3 'MED. OUTPATIENT'
/ INCOME 1 'LESS THAN $5,000 PER YEAR' 2 '5-9K'
3 '10-14K' 4 '15-19K' 5 '20-29K' 6 '30 OR MORE K'
/ MARSTA 1 'NEVER MARRIED' 2 'MARRIED' 3 'DIVORCED'
4 'WIDOWED' 5 'SEPARATED' 6 'LIVING TOGETHER'
/ FREQATT 1 'LESS THAN ONCE A YEAR'
2 'ONCE OR TWICE A YEAR' 3 '3-11 TIMES A YEAR'
4 '1-3 TIMES A MONTH' 5 'WEEKLY'
6 'MORE THAN ONCE A WEEK' 7 'NOT AT ALL'


MISSING VALUE ED (00) INCOME (0) FREQATT (0)
RWB TO EWB (00) SWB (000).
```

001: 2 36 18 6 2 2 27 41 068 43 41 39 52 51 49 52 64 42 45 53 45 54 54 46 42 53 58 42 54 61
002 2 32 15 3 1 5 39 35 074 37 47 39 49 44 65 36 58 58 59 42 39 51 41 55 47 42 37 49 68 55
003 1 23 14 5 1 1 42 29 071 55 47 44 36 37 38 42 39 42 49 25 23 35 30 29 38 36 30 73 59 55
004 2 39 13 5 3 1 24 39 063 55 41 57 47 51 36 68 57 42 45 58 58 57 59 48 56 42 56 56 37 64
005 2 24 12 5 6 2 33 41 074 66 41 49 58 56 43 52 42 42 42 55 53 51 55 51 47 63 58 56 52 47
006 2 49 12 5 2 6 41 36 077 61 41 57 58 51 49 42 42 46 57 26 34 31 33 33 42 36 37 70 68 66
007 2 34 12 5 2 1 42 31 071 55 41 47 47 44 49 36 49 46 55 38 28 39 51 48 42 42 44 49 54 68
008 2 35 13 5 2 5 48 28 076 43 53 54 39 42 38 42 34 46 54 23 26 31 27 33 29 31 37 73 65 64
009 1 21 12 4 1 4 51 45 056 43 53 44 43 49 43 68 42 58 59 42 42 46 46 44 42 47 58 49 59 66
010 2 34 14 3 1 3 28 19 039 37 59 32 65 68 65 52 64 46 77 36 23 49 43 48 36 36 38 63 70 62
011 2 28 13 4 3 6 56 53 111 49 41 52 43 47 38 57 38 46 37 64 58 62 62 59 56 58 58 48 46 48
012 1 21 12 4 1 4 53 41 054 49 47 25 43 47 49 42 38 46 49 35 39 31 43 29 33 63 37 63 52 73
013 2 42 12 6 2 1 15 34 049 49 41 52 44 44 49 42 42 55 48 58 58 59 56 44 51 63 58 63 43 47
014 2 33 14 6 2 5 23 43 072 66 41 64 35 37 36 42 34 37 34 31 36 34 35 29 33 42 44 63 48 71
015 1 36 12 5 2 6 68 55 115 61 53 49 43 42 43 47 42 42 48 55 55 45 56 51 68 56 51 61 48 43
016 2 31 13 6 2 3 49 44 093 55 41 59 33 33 48 36 34 36 54 26 28 39 27 33 47 42 23 65 74 71
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018 2 68 15 6 3 5 41 48 081 37 41 54 46 49 42 47 42 46 34 61 58 59 64 66 65 63 58 37 41 48
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021 2 36 16 6 2 3 28 48 076 49 41 49 46 42 56 42 45 42 34 66 63 62 56 78 51 63 58 35 39 43
022 1 37 12 6 2 1 28 35 063 43 41 49 46 35 56 42 49 46 49 57 53 51 51 44 68 47 58 48 48 61
023 1 22 14 3 1 4 57 42 099 43 47 52 43 47 38 36 45 37 47 38 31 51 46 48 38 42 44 58 54 68
024 2 38 16 6 2 5 55 33 088 49 53 44 43 47 48 47 34 58 54 31 45 34 33 33 38 53 51 68 65 71
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046 2 28 13 6 2 1 26 44 072 37 59 35 56 47 62 47 62 47 42 47 39 54 55 59 32 58 44 46 59 62

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093 3 52 13 6 2 5 52 46 100 55 59 49 54 56 49 47 57 50 55 58 39 67 59 51 42 36 56 56 30 43
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101 3 45 14 4 3 5 52 42 094 61 47 52 44 44 36 47 49 42 42 43 50 33 43 40 56 47 65 53 54 73
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118 3 36 12 5 3 6 59 54 113 61 47 64 35 37 36 36 38 42 35 54 55 51 54 37 51 53 58 54 35 54
119 3 36 14 6 2 6 60 57 117 55 41 49 39 35 45 42 38 46 40 65 63 59 56 55 56 63 65 37 39 43

APPENDIX G

Vita

VITA

Deborah B. Sherman

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Portland, Oregon 97206
(503) 236-4588

EDUCATIONAL BACKGROUND:

PH.D. Doctoral Candidate in Clinical Psychology
Western Conservative Baptist Seminary; Portland, OR
Degree to be conferred December, 1986.

M.A. in Clinical/Counseling Psychology, June 1984;
Western Conservative Baptist Seminary; Portland, OR

M.S. in College Student Personnel Administration, 1975
Indiana University; Bloomington, IN

B.S. in Psychology and Sociology, December 1972
Purdue University; West Lafayette, IN

PREDOCTORAL INTERNSHIP EXPERIENCE:

Clinical Psychology Intern- Western Psychological and Counseling Services; Portland, OR
Provide therapy for clients with affective and anxiety disorders. Other client concerns include marital difficulties, parent-child relationships, abusive relationships. (1/85 to 12/86)
Supervisors: Rodger K. Bufford, Ph.D.
Paul E. Sundstrom, Ed.D.
Wayne E. Colwell, Ph.D.
J. James Lundy, Ph.D.

Clinical Psychology Intern
Clackamas County Mental Health Center; Milwaukie, OR
Individual assessments and group therapy with involuntary alcohol clients; assessments, individual and family therapy in Child & Family program; psychoneurological, intellectual and personality assessment of chronically mentally ill clients; individual and group work with chronically mentally ill, including consultation with case managers and community liaisons. (7/85 to 6/86)

Supervisors: Michael Simpkins, Ph.D.
Ronald J. Lajoy, Ph.D.

SUPERVISED PRACTICUM EXPERIENCE

Therapist
Western Psychological and Counseling Services Center
Portland, OR
Provided diagnosis and therapy for children, adolescents, and adults. Included assessment, play therapy, and vocational counseling. (6/84 to 12/84)

Supervisors: Rodger K. Bufford, Ph.D.
Paul E. Sundstrom, Ed.D.

Psychological Evaluator
Portland Adventist Medical Center; Portland, OR
Provided psychological evaluations for children in the rehabilitation program. Prepared diagnostic reports for consultation with parents, teachers, and referral agencies. (2/84 to 12/84)

Supervisor: Paul E. Sundstrom, Ed.D.

Psychological Evaluator and Family Therapist
Linn and Benton County Children's Services
Albany and Corvallis, OR
Provided psychological evaluations for children, adolescents and adults involved with family therapy. Prepared reports and consulted with caseworkers and parents. Co-therapist in intensive family therapy sessions with community family therapy team. (6/84 to 12/84)

Supervisors: Dr. Rob Cooley, Ph.D.- Community Family Therapy Team with Children's Services Division
Dr. Wayne Colwell, Ph.D. - Clinical Psychology Faculty, Western Conservative Baptist Seminary

Counselor
Indiana University Counseling Lab; Bloomington, IN
Counseled individual college students and adults on appointment and drop-in basis. Responsible for intake of wide range of clients and long-term counseling. Included marital therapy. (1/75 to 5/75)

Supervisor: Dr. Paul Munger, Indiana University Counseling Faculty

SUPERVISED PRACTICUM EXPERIENCE, CONT'D

Counselor- Indiana Boys School; Plainfield, IN
Provided individual and group counseling in the intensive treatment (maximum security) unit for adolescent males. (9/74 to 12/74)

Supervisor: C. James Walker, Indiana Boys School
Dr. Marianne Mitchell
Indiana University Counseling Department

RELATED COUNSELING EXPERIENCE

Psychology Graduate Fellowship
Western Conservative Baptist Seminary; Portland, OR

Responsible for supervision and training of pre-practicum and practicum M.A. level students. Included teaching counseling skills, leading small group, and use of video materials. (6/85 to 5/86)

Supervisor: Dr. Wayne C. Colwell, Ph. D.

Career Management Specialist and Associate Director
IDAK Research Associates; Portland, OR
Provided career counseling on individual and group basis. Assisted in research and development of test (Career Match) for determining career aptitude, values and interests. Taught college courses in career planning at four colleges. (6/60 to 5/83)

Resident Director
University of California; Davis, CA
Advised and counseled college students in interpersonal relationships, self-identity issues, conflict management, and career decision-making. Trained and supervised paraprofessionals in peer group counseling. Developed student leadership and supervised all facets of student life for complex of 900 undergraduate students. Published two manuals for use by Student Affairs Department. (9/75 - 6/77)

EXPERIENCE IN THE ADMINISTRATION, SCORING, AND INTERPRETATION OF THE FOLLOWING INSTRUMENTS:

Educational:
Beery Developmental Test of Visual-Motor Integration
Bender Gestalt Test for Young Children
Illinois Test of Psycholinguistic Abilities
McCarthy Scales of Children's Abilities
Peabody Picture Vocabulary Test
Spache Diagnostic Reading Scales
Stanford-Binet Intelligence Scale
Wechsler Adult Intelligence Scale-Revised
Wechsler Intelligence Scale for Children-Revised
Wechsler Preschool and Primary Scale of Intelligence
Wide Range Achievement Test

Personality:

Edwards Personal Preference Schedule
Forer Structured Sentence Completion Test
Interpersonal Behavior Survey
Minnesota Multiphasic Personality Inventory
Myers-Briggs Type Indicator
Rorschach Inkblot
Rotter Incomplete Sentence Test
Taylor-Johnson Temperament Analysi
Temperament and Values Inventory
Thematic Apperception Test

Neuropsychological:
Luria Nebraska Neuropsychological Battery
Benton Visual Retention Test
Porteus Maze
Rey Auditory-Verbal Learning Test
Rey Osterrieth Complex Figure
Story Recall
Symbol Digit
Trail-Making Test

Other Instruments:

Career Match
Kuder Personal Preference
Self-Directed Search
Sixteen Personality Factors (16 PF)
Strong Campbell Interest Inventory