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EMOTIONAL CLOSENESS IN DYADIC RELATIONSHIPS OF THE ANORECTIC
FAMILY: A PRELIMINARY ASSESSMENT USING THE FIGURE-PLACEMENT
PROJECTIVE TECHNIQUE

The University of Arizona

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EMOTIONAL CLOSENESS IN DYADIC RELATIONSHIPS OF THE
ANORECTIC FAMILY: A PRELIMINARY ASSESSMENT USING
THE FIGURE-PLACEMENT PROJECTIVE TECHNIQUE

by

Ann Elizabeth Maier

A Thesis Submitted to the Faculty of the

COLLEGE OF NURSING

In Partial Fulfillment of the Requirements
For the Degree of

MASTER OF SCIENCE

In the Graduate College

THE UNIVERSITY OF ARIZONA

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ABSTRACT

The purpose of this study was to describe patterns of emotional closeness/distance in the anorectic family system utilizing a projective technique and to compare responses made by anorectic adolescents to non-anorectic adolescents. Another purpose was to validate symbolic figure placement as a measure of emotional closeness/distance.

Three intact families composed of both parents and an adolescent female anorectic and a group of similar aged non-anorectic females provided the data. The mother-daughter relationship was portrayed as closer than the father-daughter relationship by anorectic subjects, their fathers and control subjects. Mothers' responses to the figure placement differed from scale scores and portrayed the opposite pattern. Verbal responses suggested this discrepancy was related to issues of protection and control. Non-anorectic adolescents portrayed the mother-daughter relationship as closer than did anorectic subjects, while anorectic subjects portrayed the father-daughter and marital relationships as closer than non-anorectic subjects.

CHAPTER 1

INTRODUCTION

"Right now I weigh 58 lbs., which isn't too bad for 5'2", though I want to lose a few more pounds--my hips are still too fat.

Lately I've got it down to no breakfast, a can of mushrooms for lunch, and a can of wax beans for dinner. . . . Every day I stretch my willpower a little further than it's ever been stretched before; it's like I never knew what self-respect was all about until now. The thinner I get, the better I feel. (Ciseaux, 1980, p. 1468)

Within the past decade, anorexia nervosa and other eating disorders have captured much public and professional attention. Anorexia nervosa has been described as a disorder which usually affects adolescent young women of upper and middle class backgrounds. These women often are described as perfect children by their parents and bright, hard-working students by their teachers. The beginning of this syndrome is often marked by a diet embarked upon to lose a few pounds in the face of a change or new demands the young woman is unprepared to cope with, such as the bodily changes of puberty; a move; a change in school; leaving home for the first time; or the departure of a sibling. Even when those few pounds have been lost, the dieting continues. Soon the pursuit of thinness and control over hunger become goals in and of themselves. A rigid exercise program is added to the weight loss regimen and longer hours are spent studying. Sleep is reduced. Menses cease. The young woman becomes more and more obsessed and withdrawn from family and friends.

Hunger, so strictly controlled, may lead to a secretive eating binge, followed by vomiting. An occasional lapse can become a terrifying, dominating compulsion as the struggle for control takes over more and more hours of the day. As the family becomes alarmed by the continuing weight loss and refusal to eat, violent arguments may erupt as cajoling, lecturing, and begging meet with stubborn resistance and denial. Parents may notice a change in personality. Their once compliant, charming, and considerate daughter becomes demanding, irritable, arrogant, and self-righteous. As the parents watch helplessly, their daughter becomes a walking skeleton with dry, limp hair and a yellow cast to her brittle skin, which is covered by a fine, downy hair. Food and calories now have become an obsession for the young woman as hours are spent looking for recipes, planning, and even cooking meals for the family which she refuses to eat. When comments are made about her appearance, the young woman cheerfully insists that she looks fine and has never felt more healthy or had more energy (Bruch, 1978).

According to the American Psychiatric Association (DSM III, 1980), the diagnostic criteria 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 percent of original body weight or, if under 18 years of age, weight loss of original body weight

plus projected weight gain according to growth charts, may be combined to make the 25 percent.

- 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.

Considerable controversy exists over the relationship of anorexia nervosa to other eating disorders. Only recently has the literature begun to describe a range of these disorders which occur in normal and overweight individuals who binge and purge using laxatives, diuretics, diet pills, and exercise in their less successful pursuit of thinness (Boskind & White, 1978; Fairburn, 1980; Palmer, 1979; Pyle, Mitchell & Eckert, 1981; Russell, 1979). Terms such as bulimia, bulimia nervosa, bulimarexia and the dietary chaos syndrome reflect the confusion over the classification of eating disorders. Many eating-disordered individuals often fit the diagnostic criteria for anorexia nervosa with the exception of the criteria for weight loss. They often are underweight with a severe fluid and electrolyte imbalance as a result of frequent purging and may have quite a history of severe weight loss, but do not meet the 25 percent criteria (Russell, 1979; Pyle et al., 1981). Yager (1982) argued that eating disorders were best regarded as a continuum rather than being thought of as distinct clinical entities. "Anorexia and anorexia with bulimia are at one end of the spectrum, but there are many other weight preoccupied and

psychologically distressed women who don't meet the criteria for these disorders" (Clinical Psychiatry News, July 1983, p. 9).

Since Gull first described anorexia nervosa in 1868, there also has been controversy regarding the etiology of this disorder. A wide range of causal factors have been suggested including pituitary failure, unconscious fear of oral impregnation, and an aversion to adult sexuality. Anorexia nervosa and other eating disorders now are considered as having multiple causes including genetic, physiological, psychological, familial, and cultural factors (Lucas, 1981). Recently, theorists such as Bruch, Minuchin, Selvini-Palazzoli and Yager have suggested that family structure and interaction play an important role in the development and maintenance of anorexia nervosa. The symptoms of the anorectic family member are viewed as actions needed to maintain the homeostasis of the whole family system by serving as a uniting concern for the family and diffusing pre-existing family conflicts, particularly between parents.

Norris and Jones (1979) have used family descriptions in his criteria for anorexia nervosa. These included: a positive perception of the family; patient enmeshment with the parents; a close, intact family denying conflicts; a mother's anxious and over-protective or indulgent, self-martyring behavior. In a review of the literature regarding family factors in the development of anorexia nervosa, Yager (1982) described the current view of the classical anorectic family:

In an upper middle class, highly achievement-oriented family, mother and others are constantly vigilant about their weights and they all value slimness and physical exercise. Superficially, this is a healthy family concerned with external appearances and with

avoiding social shame, diligent about putting up a congenial facade. Certain unaddressed conflicts between the parents lurk below the surface. There is a lack of fulfillment as a couple (often manifest in part in sexual difficulties) and chronically depressed parents find themselves striving for other fulfillments --mother with her children and father with his work. The family communicates along narrow lines and rigidity denies or minimizes that any one is angry toward anyone else. Parental stresses and concerns are channelled and deflected toward the children so mother becomes excessively involved with them. Because of their own limitations, parents are somewhat fearful of their children's adolescent psychosexual development and impending separation.

This parental overinvestment and overdirectiveness leads to a situation in which a vulnerable daughter becomes more concerned with parental approval than her own internal satisfaction. Furthermore, the parents inadequately acknowledge the child's individuality, so she develops a fragile self-image and feels that there are no real areas of self-control. Her poor sense of self and accompanying sense of ineffectiveness are ignored by the parents. She tries to fill an inner void, parental approval in the place of autonomy. At a point of family disequilibrium during her adolescence, anorexia begins. (pp. 43-44)

Although the literature on anorexia nervosa has described family characteristics and dynamics as critical indices, little research has been undertaken to validate these descriptions.

Statement of the Purpose

The purpose of the study was to objectively assess the closeness/distance dimension of emotional bonds between the mother-child dyad and marital dyad within the anorectic family system and to compare the findings with a group of non-anorectic adolescents. Another purpose of the study was to validate the use of the methodology, figure placement, as an assessment of emotional bonding in the anorectic family.

Rationale for the Study

Throughout history, certain body shapes have become associated with social status and beauty. Within the past twenty years there has been a shift in the idealized feminine form from the voluptuous, curved figure to the lean, angular figure. The shift occurred at a time when the average women under 30 years of age became five to six pounds heavier due to improved nutrition (Garner, Garfinkle, Schwartz, & Thompson, 1980). The emphasis on a lean, slim body shape has led to a much greater focus on diet and exercise. Weight control is portrayed by media as a primary means to achieve success and beauty for any women. Within this culture climate anorexia nervosa has become romanticized much in the same way the tuberculosis was glamorized as representing a delicate, artistic, and sensitive beauty in the nineteenth century (Sontag, 1978). Therefore, it is not surprising that epidemiological studies have documented a sharp rise in the incidence of anorexia nervosa (Jones, Fox, Babigan, & Hutton, 1980; Halmi, 1974; Kendell, Hall, Haley & Babigan, 1973; Sours, 1969).

In a recent survey of 33,000 American women conducted by Glamour Magazine (Gillis, 1984), 75% of the respondents reported "feeling too fat" while only 25% of respondents were actually overweight according to standards for height and weight. In regards to strategies for weight control, 50% of respondents reported they used diet pills, 18% reported using laxatives, 45% used fasting, and 15% turned to self-induced vomiting. Similarly, Mallich (1981) surveyed 144 junior and senior high school girls and reported that 131 of the girls

skipped meals and dieted to reduce weight while 33% of these girls were below average age norms for weight. These studies and others have highlighted the important task for both clinicians and researchers to separate the idealized from the real dimension of perceived body shape and to more clearly delineate the disease process of anorexia nervosa from other eating disorders.

Although the literature has described a classical picture of the anorectic family as an overly close family in which members are described as struggling with issues of separation, identity, attachment and self-control, few studies have been undertaken to objectively measure these more subjective descriptions. Those studies which have been conducted to address these issues have utilized complex and expensive measures of behavioral and interactional sequences and have utilized verbal or observational material generated originally during family therapy (Minuchin et al., 1978; Selvini-Palozzoli, 1978). Researchers within the area of family research have pointed out the urgent need for new approaches and methodologies to assist in the investigation of the properties of family relationships (Ackerman, 1970; Klopfer, Tittler, Friedman, & Huges, 1978).

Significance of the Study

The application of the projective measure, symbolic figure placement, to the study of family relationships within the anorectic family represents an effort to establish an overt link between the theory of the anorectic family system and the objective measurement of patterns of family relationships within this population. As a

methodology, symbolic figure placement is well documented as a valid and reliable measure of an important dimension in family relationships, emotional closeness/distance (Fisher, 1967; Gerber, 1973; Gerber & Kaswan, 1971; Gottheil, Paredes, & Exline, 1968; Guardo, 197; Guardo & Messels, 1971; Hobbs, 1966; Klopfer et al., 1978; Little, 1965; Meisels & Guardo, 1969; Tolor & Donnon, 1969; Tolor & Orange, 1969; Tolor & Salafia, 1971; Weinstein, 1965). Unlike the cumbersome and time-consuming methods previously used to investigate the anorectic family system, the figure placement technique is relatively quick and easy to administer, and the results of findings are readily interpretable.

For nurses who work with anorectic families in both in-patient and out-patient settings, symbolic figure placement may be useful as an assessment tool or a treatment outcome measure. Unlike other known projective measures (TAT, Rorschach), the figure placement task does not require specialized training to interpret. Because this is both economical and adaptable, symbolic figure placement has a potential value as a measure of emotional closeness and distance within a variety of human interactions including kinship, friendship, and nurse-patient relationships incorporating anorectic and non-anorectic families.

Theoretical Framework

General systems theory (von Bertalanffy, 1968; Miller, 1971; Putt, 1978) consists of the scientific exploration of "wholes and wholeness . . . the interdisciplinary nature of concepts, models and principals applying to systems" (von Bertalanffy, 1968, p. 9). A system is viewed as a set of interacting units with relationships among

them and is made up of units of numbers, concepts, starts, electrical circuits, living cells or human beings. All systems have properties which include system structure, or the arrangement of the units, and system process, or the functioning of the system. All systems are arranged in a rank order based on size ranging from microscopic to cosmic. All systems change over time, and systems in interaction with the environment tend to move toward greater specialization. Systems are either open or closed. Open systems freely exchange matter, energy, and information with the environment. Closed systems do not respond in this manner. A system may be adaptable or stable. A stable system has a tendency to return to equilibrium when disturbed, while an adaptable system tends to depart from its equilibrium when disturbed. Most systems contain at least one feedback loop so that information can be returned to the system, thus providing a means for the system to adjust itself to the changes from within or outside its boundaries.

Living systems (Miller, 1971) are systems made up of fungi, plants, animals, and humans. Living systems are open systems and use inputs of food and fuel to restore their energy and repair damage to their structure. A living system is made up of one or more subsystems. Subsystems are integrated together to form an active, self-regulating, developing, reproducing system with specific purposes and goals. A living system is affected by and in turn affects its environment and changes in the environment can produce stress which requires the system to adjust in order to survive. Change in a subsystem also may stress the system and lead to change in the entire system (Miller, 1971).

The Family System

The family may be viewed as a system embedded within the larger systems of culture and society and composed of subsystems of relationships and individual units. As a system, the family must adapt to internal and external changes while maintaining its own integrity.

The primary purposes of the family system are to provide social and emotional support to its members, and to rear children by allowing them to grow and adapt. Minuchin (1974) referred to the family systems as the "matrix of identity." "In all cultures, the family imprints its members with selfhood. Human existence has two elements; a sense of belonging and a sense of being separate. The laboratory in which these elements are mixed and dispensed is the family" (Minuchin, 1974, p. 47).

The family carries out its functions through various subsystems. Each family member is a specific unit and each dyad of individuals is a relationship subsystem, i.e., husband and wife, mother and child, father and child, brother and sister (see Figure 1). Each individual belongs to different subsystem relationships, based on factors such as age, sex, or emotional alliances. Each family subsystem has its own boundary which defines who belongs within its structure and who does not belong, and how members interact with others. The function of boundaries is to protect the differentiation or individuation of the whole system, while allowing the subsystems to function independently. Thus, family functioning may be compromised when subsystem or family boundaries are poorly defined. Minuchin (1974) referred to maladaptive boundary functioning as enmeshment

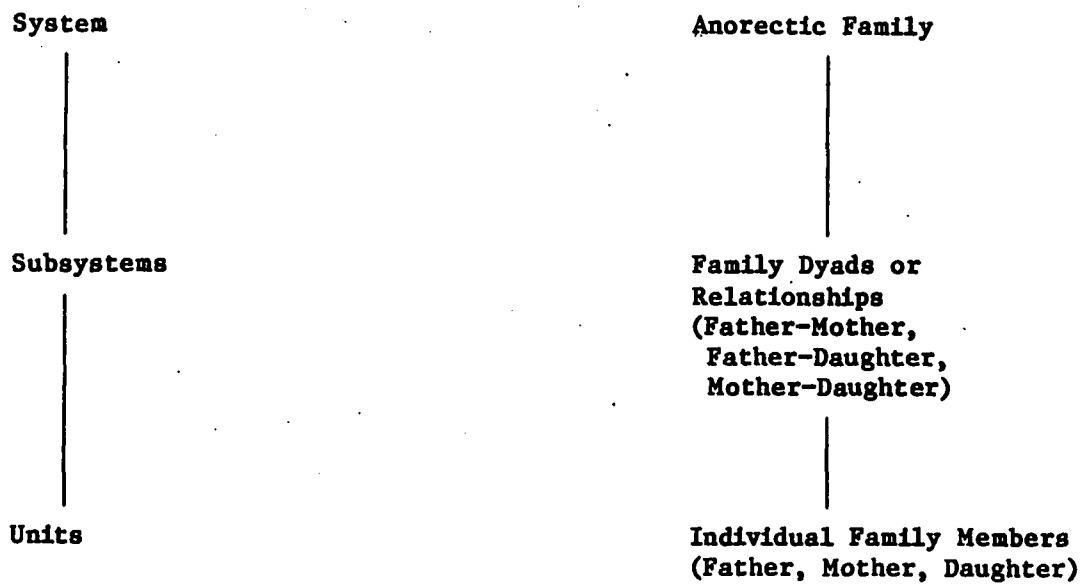


Fig. 1. Diagram Illustrating Hierarchical Ordering of Systems Levels and Anorectic Family System Levels

(blurred boundaries) or disengagement (rigid boundaries). Enmeshment threatens autonomy of the individuals within the family while disengagement alters the sense of belonging and interdependence of family members.

Dyads Within the Family System

Dyads are subsystems of the family system and are minimally composed of two units, two individual family members. Dyads are stable, enduring relationships through which much of the family communication occurs (Troll & Smith, 1976). For example, ties between individual family members (i.e., husband-wife, parent-child, and sibling-sibling) persist throughout life and may continue even after the death of one of the individuals. Dyadic relationships differ from triadic relationships in that dyads represent a natural coalition between members, a united front. In contrast, triads are less stable and are characterized by shifting coalitions. Customarily, coalitions divide into two individuals against a third (Barnard & Corrales, 1979). Furthermore, dyadic relationships differ from group relationships, like a family, in that dyadic relationships are characterized by feelings of intimacy and obligation while group relationships are characterized by feelings of loyalty and solidarity (Troll & Smith, 1976).

The marital dyad is the original dyadic relationship of any family and, as such, creates the blueprint for the future family system (Minuchin, 1974). Parents are the architects of the system and their relationship is the key to all other family relationships. When there is difficulty in the marital pair, there are, more than likely, problems

in the family (Satir, 1964). To form the marital dyad, the couple must separate from their families of origin and negotiate mutual accommodation in a large number of small routines (Minuchin, 1974). With the birth or adoption of the first child the functions of this dyad enlarge to include parental skills. A boundary must be established to incorporate the additional unit, the infant. Social and emotional linkages between units change over time as each member grows older, and the size of the family system is altered through additions and deletions of members.

The parent-child dyad represents a cross-generational relationship which may begin during pregnancy. During pregnancy, the parent faces two tasks: first, the acceptance of the child as part of himself/herself, and second, the recognition of the child as a separate being (Bibring, Dwyer, Huntington, & Valstein, 1961). This balance between belonging and separateness in the parent-child relationship shifts throughout childhood and adolescence in response to the developmental needs of the child as well as the adult (Minuchin, 1974). The parent-child relationships, and the mother-child relationship in particular, serve as a model for all the child's future dyadic relationships.

The mother-daughter dyad may differ from any other parent-child dyad in the degree of emotional intensity exchanged within the relationship, the strength of personal identification with one another, and the degree of ambivalent feelings involved in the identification (Flax, 1978). Troll and Smith (1976) observed that most families in the

world seem to be linked through women. The dyadic relationships which are the focus of this study include the marital dyad and the mother-daughter dyad. The process proposed for study is the closeness/distance dimension of the bond between family members.

Bonding

A bond is defined in Webster's World Dictionary (1976) as:

"Anything that binds, fastens or restrains; fetters, shackles; a uniting force, tie, link; a binding agreement, covenant; a duty or obligation imposed by contract" (p. 160). This definition suggests that a bond may imprison as well as unite. Thus, dyadic relationships may be described by characteristics such as reciprocity, intensity, and identification. In this study, bonding refers to the process which occurs between two individuals in a dyadic relationship for the purposes of keeping the dyad together.

The process of emotional bonding between two individuals of any species represents a significant evolutionary advancement in that the process encourages a slower rate of independent, emotional growth for infants. The increased dependency of infants allows for an advancement in the developed complexity of the central nervous system and paves the way for group living experiences. These group experiences culminate in mutual defense, patterns of expanded food supply, the facilitation of reproduction, and the education and socialization of the young (Kaufman, 1970). As Darwin stated, "The feeling of pleasure from society is probably an extension of the parental or filial affections, since the social instinct seems to be developed by the young remaining

for a long time with their parents, and this extension may be attributed in part to habit, but chiefly to natural selection" (Kaufman, 1970, p. 6).

One characteristic of this identified emotional bond between two individuals is reciprocity defined as "mutual action, dependence, . . . mutual exchange" (Webster's New World Dictionary, 1976, p. 1185). In human infants, it appears that their behaviors of eye contact, smiling, and laughing, which occur between the fourth and sixth week of life, serve to release strong emotional feelings of pleasure and comfort from the mother which allow and encourage the mother to feel more strongly attached to her infant (Robson, Pederson & Moss, 1969). The formation of emotional bonds between adult strangers begins with the mutual physical attraction and continues to be developed through an emotional attachment initiated and maintained by a sharing of interests, desires, ambitions; achievement of mutual goals; and withstanding frustrations (Benedek, 1970).

A second descriptive characteristic of emotional bonds is intensity defined as "great energy or vehemence of emotion, thought, or activity" (Webster's New World Dictionary, 1976, p. 733). Words such as "love" and "affection" represent the positive side of the continuum of emotions characteristic of marital and parent-child bonds, while emotions such as anger and hate represent the opposite or negative aspects of intense relationships between two individuals. "Violence is most prevalent in the family, where love is also found" (Troll & Smith, 1976, p. 163). Bach and Wyden (1969) suggest that hostility is an

emotion that has made intimacy both possible and bearable, and conflict provides a means for individuals to regulate the intensity of involvement by locating an optimal distance within their relationship. Troll (1972) found that adolescents often set up conflictual situations with parents over seemingly trivial concerns rather than the more serious issues, in order to protect the fragile tie that bonds parents and adolescents together. Some anger was seen as an inevitable part of all close bonds, and the absence of conflict was perceived as more a sign of coolness than of involvement.

Finally, identification is another important aspect of dyadic bonds and is defined as "mainly an unconscious process by which a person forms a mental image of another person important to him, then thinks, feels in a way which resembles the image" (Webster's New World Dictionary, 1976, p. 696). Benedek (1970) states that the sharing or reciprocity between marital partners strengthens the identification between each participant and defines the relationship as exclusive and significant. The marital partner becomes part of the self-system of the other person and also a critical measure of the other partner.

Much has been written about a child's development of role identification with the parent and how this process plays an important part in the formation of the child's identity. An important stage in the child's process of identification is the internalization of the parent as part of the child's self-system. In turn, the child's process of internalization brings about a change in the self structure of both parents. For example, the presence of a thriving infant contributes to

the role confidence of both parents. In contrast, an angry, frustrated infant may threaten the parents' view of themselves as "good parents" and increase feelings of anger and hostility toward the child. In addition, the parent's process of identification with the child may incorporate feelings of fear or anticipate developmental conflicts for the child because they, themselves, experienced similar situations in childhood. These fears or expectations either may lead to future interactive difficulties between parent and child or may allow the parent to rework and master those conflicts which previously produced intrapsychic distress. "While the parent consciously tries to help the child achieve his developmental goal, he cannot help but deal with his own conflicts unconsciously, and by this, normally achieve a new level of maturation" (Benedek, 1970, p. 13).

In sum, the emotional bond between family members grows and changes to respond to the needs of all individuals, and this bond can be described by the processes of reciprocity, intensity and identification. In infancy, an intense inequitable bond where the parent does most of the giving is required and necessary for the child to maximize physical growth and emotional potential. A much different type of bonding is needed in adolescence when both parent and child must relax the dependent tie of childhood to facilitate the child's emotional and physical separation from the home. Thus the family bonds can be viewed along a continuum of emotional closeness and distance with the optimum distance between individuals varying throughout the individual's and family's life cycle. Bonds which are either too close

or too distant can compromise the psychological development of individuals, dyadic relationships, and the entire family system. A lack of flexibility or elasticity in a family's bond to one another inhibits the capacity of each family member to respond to their own and other individual's needs.

The Continuum of Emotional Closeness/Distance

Webster's New World Dictionary (1976, p. 268) defined close as "denoting nearness; with little space between; . . . fitting tightly, near in interests, affections, etc., intimate, familiar." Distance is defined as "having a gap or space between; separated; far apart or far away in space or time; . . . far apart in relationship, remote, cool in manner, aloof, reserved" (p. 409). Klopper et al. (1978) described the bond between two individuals in a family as representing a continuum with the opposite ends being labelled closeness and distance. Other concepts described in family systems literature support the spatial quality of the closeness/distance dimension, e.g.; enmeshment/disengagement (Minuchin, 1974); fusion/emotional divorce (Bowen, 1976); connectedness/separateness (Hess & Handel, 1959); consensus sensitive/ interpersonal distance sensitive (Reiss, 1971); high cohesion/low cohesion (Olson, Sprenkle & Russel, 1970). Kantor and Lehr (1975) utilized distance regulation as the basis for their model of family interaction and suggested that all family communication includes a distance signal. For example, when a child grimaces at a forceful hug from a parent, the grimace may mean that the parent is exerting

too much intensity for the child to feel comfortable reciprocating the affection.

In regulating its exchanges of the heart, a family determines how its members join and separate from one another. . . . All kinds of issues are raised by the ways in which a family regulates the emotional distance among members. Affirmation, loyalty, emotional acceptance and affirmation, all include complicated joining and separating maneuvers. In emotional distance regulation, the ideal of the family is to satisfy its members' needs for intimacy and nurturance. Realization of this goal is complicated, however, for the emotional distance which affirms one member may violate another and leave a third relatively unaffected. . . . In this, family members are forever learning from one another how and when joinings and separations are tolerable, optimal, or intolerable. (Kantor & Lehr, 1975, p. 47)

CHAPTER 2

REVIEW OF THE LITERATURE

Demographic Characteristics of Anorectic Patients and Families

Anorexia nervosa is most commonly found in young women as evidenced by the findings of Garfinkel and Garner (1982) who reported that of the 221 cases referred to them between 1976 and 1981, only 3.3% were males. Although most of their cases were from middle and upper socioeconomic backgrounds, a number of reports in the literature have found that the disorder is more evenly distributed across all socioeconomic classes (Crisp, Palmer, & Kalucy, 1976; Morgan & Russel, 1975). Anorexia is most frequently diagnosed in adolescence although there has been a trend toward an increased age of onset (Garner and Garfinkel, 1982). There appears to be two ages at which the risk for development of anorxia is highest, age 14 and age 18 (Halmi, Casper, Eckert, Goldberg, & Davis, 1979), and it appears that the incidence of anorexia nervosa has been on the increase in recent years (Jones et al., 1980; Halmi, 1984; Kendell et al., 1973; Sours, 1969).

Demographic data regarding families of anorectic patients suggest that the parents are somewhat older than most parents at the time of the birth of this child (Halmi et al., 1977; Garfinkel & Garner, 1982), and that the marriages of parents are relatively stable with fewer divorces and separations than the general population (Bruch,

1983; Hall, 1978; Halmi et al., 1977). Sisters of anorectic patients are at a higher risk for this disorder than girls in the general population, and there was a larger representation of twins in the population of anorectic patients than one would expect (Dally & Gomez, 1979; Hall, 1978; Halmi et al., 1977; Garfinkel, Moldofsky, & Garner, 1980; Theander, 1970; Garfinkel & Garner, 1982). Furthermore, it has been observed that the more passive, submissive twin is at greatest risk for developing symptoms of anorexia (Bruch, 1969; Garfinkel & Garner, 1982).

Reports of emotional illness in families of anorectic patients suggest that emotional illness occurs at the same proportion as in the general population (Kay & Leigh, 1954; Theander, 1970). However, several findings have been reported that indicate depression may be more common in parents of anorectic patients than in the general population (Kalucy, Crisp & Harding, 1977; Winokur, March, & Mendels, 1980), and when compared with the general population, a higher incidence of alcoholism in the parents, particularly fathers, has been found (Hall, 1978; Kalucy et al., 1977; Kay & Leigh, 1954). Finally, two studies have reported finding an increased prevalence of obsessive-compulsive characteristics of the fathers and phobic avoidant behaviors of mothers (Crisp, Harding & McGuinness, 1974; Kalucy et al., 1977).

Kalucy et al. (1977) suggested that the families of anorectic patients have a higher degree of weight pathologies including obesity, weight fluctuations, and being underweight. In addition, 27% of the mothers and 16% of fathers were found to be chronically dieting, and

exercise seems to be overvalued by all members. An overrepresentation of parents involved in the food and nutrition industry as well as the health care professions has been documented (Crisp, 1967; Crisp et al., 1974). In one reported case study, parents of an anorectic adolescent actually stated that they preferred their daughter's body proportions to be quite underweight (Ben Tovim, Hunter & Crisp, 1977).

Etiology of Anorexia Nervosa

Several theoretical models or approaches have been developed to describe the etiology of anorexia nervosa, i.e., medical, psychodynamic, behavioral and family systems theory. The first description of anorexia nervosa was made by Richard Morton in 1689 who described the physical condition as "like a skeleton only clad in skin" (cited by Minuchin et al., 1978, p. 11). Writing in the 1880's, William Gull coined the term "anorexia nervosa" and he plus E. C. Lasegue, working independently, both suggested a psychological basis for the disorder. It was Lasegue who first commented on the role of the family in the illness, saying "The description . . . would be incomplete without reference to their home life. Both the patient and her family form a tightly knit whole, and we obtain a false picture of the disease if we limit our observations to the patient alone" (cited by Minuchin et al., 1978, p. 12).

The Medical Model of Anorexia Nervosa

The medical model has focused on the hormonal and neuroendocrine mechanisms which create a state of vulnerability to

anorexia nervosa. "Simmonds Disease," named after a pioneer in the field, was applied to many patients who suffered from cachexia, whether or not there was a demonstrable pituitary insufficiency, as stipulated by the diagnosis (Lucas, 1981). Although medical research has clearly demonstrated that a disturbance in hypothalamic function does exist (Vigersky, 1977), the question of whether this is an effect of physical starvation or predates the weight loss remains unresolved. "Lest overemphasis be placed on possible hypothalamic immaturity as the origin of the disease, it should be not forgotten that the hypothalamus is under control of higher cortical centers of the brain" (Lucas, 1981, p. 258).

The Psychodynamic Model of Anorexia Nervosa

The psychodynamic model suggests that the genesis of the illness is an early disturbance in the parent-child relationship, particularly the maternal-child relationship. Early emotional attachment within the psychoanalytic model has emphasized descriptions of oral conflicts and fixations at the oral phase of psychosexual development. Specifically, Waller, Kaufman and Deutch (1940) suggested that anorexia nervosa developed as a defense against guilt associated with fantasies of oral impregnation. Later, Friedman (1984) suggested that unconscious survivor guilt played a role in the development of anorexia nervosa, in that self-starvation functioned as a punishment for the child's desire for independence and autonomy from parents. These desires were experienced as disloyal and damaging to the parents,

particularly the mothers, whom Friedman described as "fragile, depressed, dependent women who looked to their daughters to supply much of what they lacked" (Friedman, 1984, p. 35).

Other authors who support psychodynamic viewpoint described somewhat different disruptions within early dyadic relationships. Based on the study of 12 patients, Bruch (1962) outlined the "typical form of anorexia nervosa" which encompassed three core psychological disturbances: (1) a disturbance of body image; (2) a disturbance in the accuracy of perception or cognitive interpretation of stimuli arising from the body; and (3) a paralyzing sense of ineffectiveness which pervades all thinking and activities. These disturbances were attributed to the mother's failure to respond accurately to the infant's cues during the early years of the mother-child relationship. Selvini-Palazzoli (1978) speculated that during early feeding experiences, the child was treated by the mother as a "mere appendage and never an individual" (p. 85). Mother was described as a possessive and controlling figure and the combination of early feeding experiences and mother's personality resulted in the child experiencing her own body as not being her own but belonging to her mother. In an attempt to achieve autonomy, separation and personal control, the body, itself, was viewed by the adolescent as a threat which must be rejected and controlled. Thus, Bruch and Selvini-Palazzoli originally focused disease etiology on the role of the mother-infant relationship but moved the etiology focus to patterns of family interaction.

Masterson (1977) supported object relationships as the etiological genesis of anorexia nervosa, but suggested that borderline personality disorganizations with arrested development at the separation-individuation phase of object relation formation was the etiology of some cases of anorexia nervosa. He theorized that the mother's inability to tolerate the child's efforts to separate and become autonomous reinforced the child's clinging and dependent behavior. To insure the maintenance of the child's dependent role, mothers withdrew attention when the toddler attempted to separate. In adolescence, the separation issue reemerges. The adolescent becomes highly anxious fearing that attempts to separate will again threaten the relationship with the mother and lead to a withdrawal of love and attention.

Similarly, Sours (1969) suggested that the mother's use of the child for her own fulfillment interfered with the process of separation-individuation throughout all phases of the child's development. "She [the anorectic] cannot separate herself from her mother without whom the dyadic attachment promotes fusion rather than nurturance" (Sours, 1979, p. 75). Sours further noted that developmental histories of these children elicited from their mothers were remarkable in that infancy was described as blissful and idyllic with no mention of episodes of stranger or separation anxiety. Mothers often had difficulty remembering when the child left babyhood and reported little of the active, curious or exploratory behaviors common to toddlers. Notably lacking in these histories were descriptions of

any oppositional behaviors or behaviors associated with the Oedipal phenomenon. Furthermore, during latency and early adolescence, the child is described as a source of pride and joy and frequent references are made to the observation that the child preferred to keep the company of her parents over her peers.

In contrast, Sugarman, Quinlan and Davis (1981) suggested that both maternal overinvolvement and underinvolvement during the practicing phase of separation-individuation resulted in the suppression of the child's natural tendency for growth and independence. They suggested that the inability of the mother to tolerate the child's separateness prevented the child's establishment of a firm self-other boundary which promoted fusion and failure to develop object constancy. Their conceptualization, similar to the earlier described model of Selvini-Palazzoli (1978), was that the anorectic perceives her body as not being her own but as a threatening object to be controlled.

The Behavior Model of Anorexia Nervosa

Although behavioral models are not interested in the dynamic etiology of anorexia nervosa, these models are concerned with changing behavior patterns as an etiologic explanation of illness. Brady and Reiger (1977) approached the syndrome as an eating phobia, stating that eating generates anxiety due to fear of weight gain and the refusal to eat represents avoidance of that anxiety. Operant conditioning techniques can be used to diminish anxiety by shaping more healthy eating behaviors through the use of reinforcement. Because desired

results occur fairly rapidly using behavioral techniques, most hospital programs utilize operant conditioning principles to reestablish and normalize weight and eating patterns (Garfinkel & Garner, 1982).

Outcome studies have indicated that weight replacement strategies in the absence of other treatment interventions fail to produce a lasting change for anorectic patients (Minuchin et al., 1978).

The Family System Model of Anorexia Nervosa

Minuchin et al. (1978) categorized the models thus far discussed (medical, psychodynamic, and behavioral) as linear models. These models were seen as solely focusing on the individual patient. He stated that the exclusion of numerous environmental and contextual components of the syndrome limited not only the range of understanding but also the possibilities for treatment intervention. Unlike these linear models, the Systems model portrays behavior as both caused and causative and symptoms as related to certain types of family organization which appear to develop and maintain the illness (Minuchin et al., 1978). The symptoms themselves play an important role in maintaining family homeostasis or balance through patterns of interaction between defined subsystems (dyadic relationships) and units (individuals). Garfinkel and Garner (1982) supported the view that psychodynamic formulations overemphasized the role of pathological mothering while neglecting the child's role in disturbed parent-child interactions. Selvini-Palozzoli (1978) also shifted from a linear to a systems model, stating

In opting for a new approach, I first had to solve a crucial methodological problem. As Haley has pointed out, the problem is no longer how to characterize and classify individuals: it is how to describe and classify habitual patterns of responsive behavior exchanged by intimates. (Selvini-Palozzoli, 1978, p. 195).

Bruch (1978, p. 196) also suggested a movement toward a systems orientation, saying:

The development of anorexia nervosa is closely related to abnormal patterns of family interaction that successful treatment must always include resolution of the underlying family problems, which may or may not be identifiable as open conflicts; on the contrary, quite often excessive closeness and over-intense involvements are at the roots.

Minuchin et al. (1978, p. 51) coined the term the "anorectic family" to more clearly describe the anorectic's role: "the identified patient as an active participant in a process in which there are no victimizers or victims, only family members involved in the small details of everyday living." Within this family topology, four characteristics of the anorectic family emerged: enmeshment, overprotectiveness, rigidity, and lack of conflict resolutions. Enmeshment refers to "an extreme form of proximity and intensity in family interactions" (Minuchin et al., 1976, p. 30). Enmeshment can occur anywhere within the system, such that unit or relationship boundaries are poorly defined and easily crossed. The evolved confusion over physical and emotional boundaries interferes with the function of any subsystem, particularly the parental subsystem. At the individual unit level, personal individuation and autonomy are sacrificed for family togetherness, and privacy is often violated by acts of physical and emotional intrusiveness. Overprotectiveness is evidenced by subordination of the marital relationship interactions,

with strong focus on parental functions. All family members value protection and loyalty more than independence or involvement outside the family. Rigidity can be seen in the energy the family extends to maintain the status quo and to keep up an appearance of harmony. Conflict avoidance is maintained at high cost by strategies such as triangulation (parental involvement of the child in any conflict situation between spouses and overtly or covertly demanding that the child take sides), and detouring (the parents cover up conflicts through concern with issues like the child's symptoms).

The validity of the Systems model was tested with 45 families, including 11 anorectic families and 15 control families (Minuchin et al., 1978). Families were videotaped during standardized interviews and laboratory simulation of family tasks which included family arguments. The four described characteristics (enmeshment, overprotection, rigidity and conflict avoidance) were found to significantly differentiate the interaction patterns of anorectic families from those of control families.

Palazzoli and the Milan study team (1978) analyzed the content of family therapy sessions of 12 anorectic families and described the family interaction patterns as:

1. there is a willingness to communicate;
2. every member of the system defines himself in the relationship in a coherent manner;
3. every member rejects messages of other members with a high frequency;
4. all family members have great difficulty in playing the role of leader overtly . . . ;
5. all alliances of any two against a third are proscribed; and
6. no member will accept blame for anything.

(pp. 240-241)

Stern, Whitaker, Hagemann, Anderson and Bargman (1981) combined the psychodynamic model with the family systems model to suggest that all members of the anorectic family were developmentally arrested in the area of separation-individuation, and noted that family interactions maintained this emotionally and physically destructive state of affairs. Parents, themselves, often were found to have experienced deficits in early parenting skills and family interactions were organized around an unconscious need to avoid separations at all costs.

The suggestion of a transgenerational model of anorexia nervosa was further developed by White (1983), who noted that disturbed patterns of relatedness were transmitted from one generation to the next by the communication of rigid beliefs and values. These communications limited the range of choice for all family members and each member placed extreme value on loyalty to the family and to tradition. This intense loyalty served to discourage two-person alliances which compromised the executive functions of the parents, discouraged peer relationships for parents and children, and encouraged grandparents to intrude across the boundary of the nuclear family system. Any behaviors which failed to live up to the standard of family loyalty led to interactions which caused guilt and encouraged conformity. This process led to family interactions White described as "the currency of guilt" (p. 257). The currency of guilt is used by family members to provoke feelings of indebtedness and to discourage any deviation from rigid family interactions. Another transgenerational belief maintained by anorectic family members is assignment of the role

of women in the family as "sensitive, devoted and self-sacrificing" (White, 1983, p. 257). Often the mother is physically and emotionally committed to the care of her own mother while covertly encouraging her daughter to take care of her needs. Thus, a role-reversal between mothers and daughters is handed down as a family expectation.

Reciprocity, Intensity and Identification:
Bonding Issues in Anorectic Family Dyads

Several authors have suggested that dyadic relationships are discouraged within the anorectic family system and that triadic relationships are more commonly observed, particularly in interactions around conflictual issues (Minuchin et al., 1978; Selvini-Palazzoli, 1974; White, 1983). Within this three-sided configuration labeled "triangulation" (Minuchin et al., 1978), the child is encouraged to insert herself into parental interactions. The child may be enlisted by one parent or both parents to side with one against the other. When triangulation occurs and is maintained, the child may take over many parental functions. A stable coalition between one parent and child often forces the other parent to withdraw entirely from the parental subsystem. Within this triangular configuration the parental/marital subsystem function is compromised and the parents avoid conflict negotiation or resolution with one another. Selvini-Palazzoli (1978) noted that open or overt alliances between parent and child were prohibited, yet, covertly or secretly, the child becomes the ally of both parents, creating "three-way matrimony." Similarly, White (1983) suggested that two-person alliances were discouraged or denied because

they were perceived as an abandonment or betrayal of the third party.

Reciprocity and Anorectic Family Dyads

Research findings on reciprocity within the mother-daughter relationship indicated that both participants see themselves as obliged to give to each other, and neither one can accept what is given without guilt (Bruchs, 1978; Selvini-Palozzoli, 1978; White, 1983). Furthermore, a role reversal between mother and daughter is a frequent clinical observation which may transcend generational boundaries to include the grandmother (Conrad, 1977; White, 1983). Thus, reciprocal interactions bonding mother and daughter are ill-defined, inequitable, and frequently incur feelings of guilt for both partners.

Reciprocity within the marital relationship is described as "a hungry, needy man married to an empty, deprived woman. The script for this couple was one in which the husband said 'I want' and the wife responded 'I don't have'" (Conrad, 1977, p. 48). Selvini-Palozzoli (1978) described this reciprocal process within the marital relationship as maintenance of symmetry through sacrificial escalation. The wife perceived herself as completely dedicated to the good of the family while the husband saw himself as a good man unfairly treated resulting in "two moralistic people who consider themselves victims of a compulsory relationship" (p. 214). Bruch (1978) similarly described reciprocity in the marital relationship as superficially harmonious and

equitable but secretly competitive or uneven, with each partner perceiving themselves as making the greatest sacrifice.

Intensity and Anorectic Family Dyads

A number of researchers and clinicians have identified a high level of intensity in the cross-generational bonds within the anorectic family system. White (1983) has referred to this phenomenon as "too richly cross-joined systems," while Minuchin et al. (1978) referred to this concept as "enmeshment" or "an extreme form of proximity and intensity in family relationships" (p. 30). In the mother-daughter relationship, the intensity of bonding "promotes fusion rather than nurturance" (Sears, 1969, p. 75). The intensity of attachment between mother and daughter resulted in the daughter's inability to (1) separate herself from mother, (2) form a sense of her own identity, and (3) establish a personal sense that her body belongs to herself (Bruch, 1978; Selvini-Palozzoli, 1978; Sears, 1969; Sugarman et al., 1981). The relationship often is described as highly ambivalent. Hostility and fear of loss of the mother's love keeps the daughter in a clinging, dependent emotional state.

As compared with the intensity of the mother-daughter relationship, the marital relationship is described by Dally and Gomez (1969) as having a "schism," a chronic state of emotional separation. Bruch (1978) noted that the deep disillusionment between partners is distinguished by an outward appearance of harmony. Similarly, Selvini-Palozzoli (1978, p. 214) stated, "The marital relationship is felt to be characterized by a facade of unity which generally conceals a profound,

underlying disillusionment." Minuchin et al. (1978) suggested that the lack of conflict resolution between parents promotes disengagement rather than intimacy. White (1983) suggested that spouses may find the intensity of an intimate relationship dangerous and disruptive to the balance of their marital relationship, thus conflict is used as a means of gaining safety through distance.

Identification and Anorectic Family Dyads

Identification is the third major issue in the bonding patterns of the anorectic family. Minuchin et al. (1978) pointed out that in enmeshed families, individual identity is sacrificed for the illusion of family togetherness and sharing. Family members have been observed to frequently intrude on each other's thoughts and feelings and to frequently speak globally for the entire family. These characteristic behaviors result in each member's poorly differentiated perceptions of themselves or other family members as individuals.

In this family system it is difficult to know where one person begins and another person ends. The effect on the anorectic person is that her orientation in life gives prime importance to proximity in interpersonal contact. Loyalty and protection take precedence over autonomy and self-regulation. (Minuchin et al., 1978, p. 59)

White (1983) described a quality of family insightfulness in which "family members believe they can see into themselves and others and know the true motivations and intentions of all behaviors" (p. 258). Viewing the issue of identification within the marital dyad, it has been suggested that both spouses maintain a strong affiliation with their families of origin. Furthermore, spouses are found to be very child

oriented, subordinating their identity of husband and wife to their role as parents (Minuchin et al., 1978; White, 1984). The striving for independence by the adolescent threatens the equilibrium of dyadic relationship bonds, especially the bonds of the marital relationship, and thus threatens the whole system homeostasis. The anorectic family symptom forces the daughter to remain in the established enmeshed relationship with each parent concealing any intimate distance developed between themselves.

Summary

A family is a living system made up of smaller structural subsystems. Subsystems are maintained by social-emotional bonds between individual family members. Emotional bonds influence the functioning of the family as a whole as well as the functioning of individual family members. Subsystem bonds can be defined along a continuum of emotional closeness/distance with the optimal distance determined by the developmental needs of each individual and the whole family. Extreme positions of dyadic bonds along the closeness/distance continuum may compromise individual and family functioning as is suggested in the theoretical configuration and in clinical observation of the anorectic family system.

The bonding qualities within the dyads of the anorectic family have been discussed in both the psychodynamic and family systems model of anorexia nervosa. Case study reviews have pinpointed the mother-daughter and the husband-wife dyads as of particular import in defining the etiology of anorexia nervosa. Important aspects of the bonding

process in anorectic families are reciprocity, intensity and identification. The bond between mother and daughter is seen as extremely close or enmeshed. The tightness of this relationship may compromise the daughter's need for autonomy and separateness, curtailing the development of her identity. This closeness between mother and daughter also interferes with the marital relationship which is characterized by harmony at the cost or expense of marital intimacy.

In this study, the subjective assessment of dyadic emotional closeness/distance by family members was operationalized as the physical distance between two symbolic figures. From a review of the literature, it is anticipated that members of an anorectic family system will depict an enmeshed, over-involved bonding with one another visualized as closely placed family figures during a figure placement task. Furthermore, using the provided representative figures, it is anticipated that anorectic family members will depict the relationship between mother and daughter as particularly close and the relationship between husband and wife as more distant. In contrast, it is anticipated that a control group of adolescent girls will depict their emotional bonds with family members as more distant by using a greater overall space between members, especially between the mother and daughter figures.

CHAPTER 3

METHODOLOGY

Research Design and Questions

A comparative/exploratory design was selected to examine the patterns of emotional bonding in the anorectic family system since few studies have reported on this phenomenon using a stringent research format. This design also was selected to gather information regarding the feasibility of using a familiar projective measure, symbolic figure placement, to objectively illustrate the emotional bonds within several subsystems family relationships. Clinical observations and theoretical conceptualizations have suggested a characteristic pattern in the bond formations of relationships in anorectic families, particularly the mother-daughter and the marital dyad.

1. Will the physical placement of symbolic figures by each subject (father, mother, and daughter) demonstrate the expected closeness of emotional bonding within the mother-daughter dyad of the anorectic family system?
2. Will the physical placement of symbolic figures by each subject (father, mother and daughter) demonstrate the expected distance of the emotional bonding within the marital dyad of the anorectic family?

3. Are there differences in the symbolic figure placement distances between dyads of anorectic adolescents and similar-aged non-anorectic adolescents?
4. Will the measured distances between anorectic family dyads obtained using the symbolic figure placement task correspond in the same direction of emotional closeness/distance as the scores on two previously validated scales?

Operational Definitions

Family System--A human system defined as the mother, father, and adolescent daughter represented by subject placement of gender-specific figures on a field.

Dyadic Subsystem--A two-person relationship within the family system represented by the subjects identification of a specifically-defined two figure placement.

Emotional Bond--The emotional connectedness between two individuals described as a function of reciprocity, intensity, and identification represented by the physical distance measured between the midline of the two identified felt figures placed on a defined field.

Emotional Closeness/Distance--An individual's assessment of the emotional connectedness to another person operationalized as the vertical distance between the midlines of two felt figures placed on a defined field. "A concept that encompasses the dimension of the associational and disassociational desire, the intensity of the wish,

and the specific social target of this desire" (Tolor & Salafia, 1971, p. 423).

Anorectic Daughter--One female, adolescent child unit of a human dyad represented by a felt figure chosen by the subject, and diagnosed for a minimum of six months.

Nonanorectic Adolescent--A similarly-aged female peer of anorectic daughter who is not diagnosed as anorectic, does not meet the DSM III (1980) criteria for diagnosis, is of normal weight for age or less than 25% overweight, and represented by a felt figure chosen by the subject.

Mother--One female parent unit of a human dyad, married to the father or stepfather of the studied adolescent, and represented by a felt figure chosen by the subject.

Father--A male parent unit of a human dyad, married to the natural mother of the studied adolescent, represented by a felt figure selected by the subject.

Symbolic Figure Placement--A task which asks subjects to place designated figures cut into human shapes on a contrasting felt field. Felt figures in this study were cut into two gender-specific sizes of large and small figures. The subject, positioned in front of the field, was instructed to place the felt figures onto the field in any way he or she would like. The actual physical distance between two figures was measured from midline to midline and recorded. This recorded physical distance between two figures was assumed to represent emotional closeness/distance (Tolor & Salafia, 1971).

Instrumentation

Figure Placement Task. In regards to the use of the figure placement task with anorectic families, several advantages and disadvantages are identified. Some advantages included: (1) subjects often find it easier to be expressive when they are not asked directly about themselves or their feelings (Brink & Wood, 1978); (2) feelings and perceptions of which the subject is not consciously aware may emerge in response to ambiguous stimuli (Brink & Wood, 1978), and (3) the tendency to make responses that are considered socially acceptable is also reduced in response to a projective technique (Brink & Wood, 1978). The diminished ability to make socially acceptable responses gains importance in this study as anorectics and their families are particularly concerned with maintaining the outward appearance of harmony and well-being. In particular, the anorectic adolescent has been described as hypervigilant and a "parent-watcher" seeking to please and maintain the family's perception of itself (Minuchin et al., 1978). Finally, symbolic figure placement may be a more valid measure of family structure than behavioral observations because family structure is ideally an internalized schema which is quite difficult to describe (Klopper et al., 1978).

Compared with other projective techniques (word association, sentence completion, Thematic Apperception Test or Rorschach Inkblot Test) symbolic figure placement is easy to administer, does not require specialized training to interpret, is less time consuming, is more flexible in its application, and more directly addresses relationships

and bonds between individuals (Brink & Wood, 1968). Compared with behavioral measures of proxemic behavior, a Pearson correlation of $r = .77$ has been found between figure placement tasks and the actual placement of live actors (Little, 1965). Haase and Markey (1973) compared figure placement to live participation in order to observe actual interactions as a measure of the use of what they termed "personal space." An intercorrelation $r = .56$ was recorded and identified as significant at the $p \leq .01$ level. Klopfer et al. (1978) compared figure placement results with a measure of the amount of talk between individuals to describe "interpersonal distance" in families with emotionally disturbed child. A significant relationship ($r = .42$, $p \leq .01$) was found between the two measures when the placements included the symptomatic child.

Disadvantages of symbolic figure placement include (1) lack of established reliability across subjects, (2) lack of established validity with the population of this study, and (3) strong reliance on the cognitive abilities of subjects. With the exception of Little (1965), investigators have failed to report evidence regarding the reliability of figure placement tasks. Little (1965) reported Spearman-Brown corrected reliabilities of .81 for repeated figure placements made by female college students and .68 for male college students. He suggested these computed scores represented substantial evidence for stable individual differences in average figure placements. Although the validity of symbolic figure placement as a measure of the dimension of emotional closeness/distance has not been established with anorectic

families, the technique has been applied to families with disturbed children and valid results have been obtained when cross-checked with other known dyadic measures (Klopper et al., 1978).

Finally, Hayduk (1978) suggested that one weakness of the figure placement technique was that it relies heavily on cognitive abilities such as the imagination to create characteristics ascribed to the figures and the perspective of viewing the self from a distance. To scale down real life figures to the size of felt figures used in the figure placement may pose difficulties for a number of clients. Although these cognitive processes sound very demanding, this method has been employed successfully with grade school children (Guardo, 1969; Guardo & Meisels, 1971; Hobbs, 1966; Meisels & Guardo, 1969; Tolor, 1968; Weinstein, 1968).

In sum, though there is a need to establish symbolic figure placement as a valid measure of the dimension of emotional closeness/distance with anorectic families, this methodology offers a promising and appropriate mechanism of assessment considering its ease of application, economy of time, and its successful use with a variety of populations.

Fischer-Narus Intimacy Scale. In an effort to establish the validity of the symbolic figure placement task as a measure of the dimension of emotional closeness/distance within the anorectic family, the physical distances from the figure placement task were compared to the score results of a scale measuring the related concept of intimacy between two individuals (see Appendix A). Fischer and Narus (1981)

developed a scale to assess the level of intimacy between a subject and another person, and defined intimacy as "a close, positive relationship" (p. 448). These investigators first used the scale to examine the relationship between sex roles and degrees of intimacy in normal relationships of male and female college students. A Cronback's alpha of .93 was reported across scale items, and validity was established both by comparing the intimacy scores of help-seeking and non-help-seeking couples and by correlating scale scores with scores obtained on known scales of similar content. These investigators concluded that the scale had satisfactory predictive and concurrent validity and that the scale was appropriate for measurement of intimacy in sexual as well as non-sexual relationships (Fischer & Narus, 1981). The Intimacy Scale also was used to operationalize the concept of emotional closeness in a study of relationship styles in middle and late adolescence. Factor analysis of scale scores found that factors which associated with intimacy included variables which measured ease of communication, non-egocentrism, and closeness/distance (Fischer, 1981).

The response format of this 39-item, Likert-type scale ranged from a score of one (indicating strong disagreement) to a score of six (indicating strong agreement). Items are worded in both positive and negative directions with reverse scoring employed for negatively worded items. Initially the total score divided by 39 yielded a number from one to six, representing the continuum of non-intimacy to intimacy. For the purpose of this study, all scores were reversed so that a lower total score reflected a more intimate relationship. This score

reversal accommodated a visual comparison with physical distances obtained from all participants on the figure placement tasks where smaller distances reflected a more intimate or closer relationship. Written instructions on the scale were adapted to read, "Consider the relationship you have with your _____ (daughter, mother, father, wife, or husband) and answer the following questions according to how much you think this is true of your relationship." The scale was retitled the "Interpersonal Inventory" for the purposes of this study so as not to contaminate responses to the figure placement projective measure.

Semantic Differential. A third instrument used to operationalize the concept of the emotional closeness/distance dimension was adapted by the investigator from the well-known semantic differential technique and was titled "Relationship Assessment Tool" (see Appendix B). The semantic differential technique originally was developed to measure (1) the difference between two groups in the meaning of the same concept; (2) the difference in the meaning of two concepts of the same group, (3) the difference between two concepts for the same individual; and (4) the difference between two individuals in the meaning of the same concept (Osgood, Suci, & Tannebaum, 1957).

The essential operation of measurement is the successive allocation of a concept to a series of descriptive scales defined by polar adjectives, these scales are selected so as to be representative of a major dimension along which meaningful processes vary. (p. 31)

The scale adapted for this study utilized fifteen, seven-point, bipolar adjective pairs to tap three factor dimensions of meaning, i.e., the evaluative factor, the potency factor and the activity factor

(Osgood et al., 1957). The 15 pairs included: the evaluative factor (acceptance-rejection, interest-disinterest, selfish-unselfish, love-hate, admire-despite); the potency factor (near-far, warm-cold, deep-shallow, full-empty, strong-weak); and the activity factor (caring-uncaring, active-passive, seek out-avoid, increasing-decreasing, supportive-non-supportive). These adjective pairs were drawn from definitions of emotional closeness/distance and intimacy previously presented in this text. Subjects were given a scale with the directions: "Put an X in the space between the two words which best portrays your feelings about your relationship with your _____ (daughter, mother, father, husband or wife). This scale was titled the "Relationship Assessment Tool" for this study.

Demographic Information. General information was elicited from subjects using a questionnaire format which accompanied the two other scales (see Appendix C). Information requested included age, sex, ethnic background, family composition, birth position of subject, educational level, socio-economic status, parents' marital status and subject's interest in future marriage and family. The parents of anorectic subjects were asked for the same information about themselves and, in addition, were asked about their child's school performance, length of time since diagnosis, length and types of treatment, and their perceptions of their child's recovery, weight, social involvement and family involvement.

Procedure

Sample

Sample Selection. A convenience sample of four anorectic subjects and both parents was recruited initially, but only three families provided usable data in accordance with the following criteria for the anorectic daughter:

1. between the ages of 12-19;
2. had been diagnosed as suffering from anorexia nervosa a minimum of 6 months;
3. resided in the same household with both parents at the time of data collection;
4. the subject and parents were able to speak, read, and write English.

One of the families that volunteered for participation in the study included a male adolescent as the designated anorectic member, and therefore could provide only contrast information relative to gender-specific responses.

In addition to anorectic subjects and parents, a sample of five non-anorectic adolescents were recruited initially according to the following criteria:

1. between the ages of 12-19;
2. able to speak, read, and write English;

Later two additional criteria were added to provide a better match between anorectic and non-anorectic subjects.

3. resided in the same household with both parents at the time of data collection;
4. normal weight or less than 25% overweight.

During the data collection process, one of the control adolescent girls revealed she was a diabetic, and another control subject revealed she was living with only her mother. Both of these subjects were eliminated from the reports of primary data analysis, but pertinent information was included to highlight interesting variations in responses. A fifth adolescent control was recruited who satisfied the sample-selection criteria for control subjects (see above) and was a member of an intact family system. Therefore, three control adolescent subjects provided usable data for analysis. The technique of convenience sampling was chosen because of the difficulty recruiting subjects. Despite the increasing clinical incidence of anorexia nervosa, this illness remains a relatively rare disorder which affects less than one in 100,000 individuals between the ages of 12 and 25 (Dally & Gomez, 1979). The availability of subjects was further complicated by the expected need of the anorectic families to maintain an outward appearance of harmony and stability (Bruch, 1978; Minuchin et al., 1978). Thus, many of the more than forty families contacted by postcard and therapist referral who met the criteria of the study elected not to participate.

Chronologic age was included in the selection criteria as it is an important variable related to the issues of the disease incidence, prognosis, and chronicity. Reported data indicated that the onset of anorexia occurs most frequently between the ages of 12 and 25, with the highest risk occurring at age 14 and again at age 18 (Halmi et al., 1979). Garfinkel and Garner (1982) reported that early age of symptom

onset was the most evident factor related to favorable prognosis, including a higher rate of recovery and lower rate of mortality. They suggested this finding may be related to a greater amenability to treatment and fewer chronic behavior patterns, i.e., social withdrawal, poor peer relations and an anorectic identity.

Chronologic age also is related to the normal psycho-physiological developmental issues of adolescence. Typical age-related issues include the rapid physical changes of puberty and the emotional task of acquiring a beginning level of self identity by initiating separation from the family of origin (Erikson, 1950). These very tasks are considered predisposing factors to the development of anorexia nervosa (Bruch, 1978; Garfinkel & Garner, 1982). Control subjects within the same age range of the anorectic subjects were recruited in an effort to control for effects due to developmental changes which might influence performance on the projective task.

Length of time since diagnosis was included as a part of the criteria for selection of subjects in an attempt to limit the study population to subjects who were in the active process of recovery but not fully recovered or chronic. The duration of the illness in those who do recover is quite variable (Garfinkel & Garner, 1982), but Dally (1969) noted that 83% of those persons who regained normal weight did so within three years. Similarly, Theander (1970) estimated that 40% of his clients had stabilized their weight in three years but it was more than six years before 65% of his clients recovered fully. Hsu (1980) found that family problems persisted in 40-55% of subjects who

appeared recovered at the time of follow-up. Identified problems for these subjects included heightened dependency and hostility among family members.

The Eating Attitudes Test (see Appendix D) was administered as a measure of the current level of anorectic symptomatology. This paper and pencil test was developed by Garner and Garfinkel (1978), and has been shown to both accurately differentiate anorectics from normal subjects, and to discriminate between anorectics who have recovered from those anorectics who remain symptomatic. The EATS was designed to assess a broad range of symptoms including body weight, body image, bulimia, and psychological symptoms. A score of 30 was reported to maximally differentiate individuals with eating disorders from control subjects at a 91% rate of accuracy (Garfinkel & Garner, 1982). Although the scores on the EATS were not included as part of the sample criteria, scores were obtained as an indicator of the present level of symptomatology of all adolescents.

Only family members residing in the same household were included in the study. It was felt that living away from the home might affect the emotional bonding in family relationships, and present a confounding issue to be considered during data analysis. For example, Minuchin et al. (1978) placed much importance on the "small details of everyday living" (p. 81) in the development and maintenance of the anorectic family system. All subjects were required to be able to speak, read and write English because the consent form and all instructions were provided to subjects in English.

Protection of Human Rights

This study was approved by the Human Subjects Committee of the College of Nursing, University of Arizona (see Appendix E). Special care was taken to protect the confidentiality of all recruited subjects. Potential subjects were first selected by their physician or primary psychotherapist who contacted them by mail or by phone call. Subjects contacted by mail were asked to return a postcard to their physician or psychotherapist indicating interest, disinterest, or a request for more information. Only those who indicated interest in participating or requested more information were contacted by the investigator and provided with information needed to secure their voluntary participation in the study. For example, the first contact with potential subjects included a general description of the study and assurance of anonymity; that participation or lack of participation in the study would not influence treatment or future health care; that they were free to ask questions at any time and questions would be answered to the best of the investigator's ability; and that subjects could withdraw from the study at any time. Signed consent was obtained from all minor subjects and parents (see Appendix F), and assurances were repeated verbally at the time of signing the consent form. Names did not appear on questionnaires, data, or consent forms, and identifying information was stored separately from the study data in the investigator's home.

Data Collection Procedure

Subjects who agreed to participate in the study via returned postcard were contacted by telephone. At the time of initial phone contact, each subject was informed that participation would require approximately one to one and a half hours of time. An interview appointment and setting of convenience for the subject and family was arranged. The setting was usually the home of the subject, although several subjects preferred to come to the private office of the investigator. As each setting of data collection somewhat different, planning was required to prevent communication among family members which might influence responses to the figure placement task.

Subjects who were identified as anorectic family members (the father, mother, and daughter) were first asked to fill out a questionnaire for each of the other two members including demographic information, a copy of the Interpersonal Inventory, and a copy of the Relationship Assessment Tool. An EATS scale was included in the daughter's packet. As each member completed the questionnaire, they were asked to accompany the investigator to a separate room in which the figure placement task was set up. The task consisted of a felt board and two sizes and shapes of felt figures representing male and female figures. The family member initially was positioned in front of the felt board and was asked to select a figure to represent themselves and the two other family members participating in the study. Next, subjects were given the verbal instruction, "Place the figures on the board in any way you choose." Following each figure placement,

subjects were asked to identify the three figures and to provide any explanation he/she might choose to share in regards to the placement of figures. Subjects were then excused with a request not to rejoin the other family members until all members had completed the figure placement task.

Measurements of the placements were recorded using a grid sectioned in one inch squares and made of clear plastic. The grid could be placed over the felt board without disturbing the placement of figures. Measurements were recorded as the midline position of each figure on x,y coordinates representing the horizontal (x) and vertical (y) position of each figure.

Two types of distance measures were recorded: the dyadic distance between any two felt figures and a total family distance. The dyadic distance between symbolic figures for each placement by an individual was calculated using a formula which allowed for the simultaneous calculation of distance across both horizontal and vertical dimensions.

$$\text{distance} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

A score of total family distance was calculated for each figure placement made by adding together the distances for each dyad:

$$\begin{aligned} \text{total family distance} = & \text{Father-Mother distance} \\ & + \text{Father-Daughter distance} \\ & + \text{Mother-Daughter distance} \end{aligned}$$

Verbal explanations of the figure placements also were recorded. Collecting data from control subjects was slightly different in that the figure placement and questionnaire were presented to only the female adolescent. No parental figure placements or questionnaire results were obtained from parents of control subjects, thus no precaution limiting family communication was needed.

CHAPTER 4

RESULTS

Considerable difficulty was experienced in recruiting anorectic subjects for participation in this study. Over the time period of a year, more than forty subjects meeting the criteria of the study were identified by the physician or primary psychotherapist and contacted via letter to request voluntary participation. Subjects were identified through private practitioners and two clinic populations in two different metropolitan areas in the southwest. Only four families agreed to participate. Thus, as in other studies of anorectic families (Minuchin et al., 1978; Selvini-Palazzoli, 1978) the sample size is relatively small.

Several factors may account for the difficulty experienced in obtaining subjects. One factor was the great care taken to protect the confidentiality of families. Initial contact was made by the physician and primary psychotherapists, either by letter or verbal contact, about possible study participation. No face-to-face contact between the investigator and subjects occurred prior to data collection. Arrangements for investigator-family contact were made by telephone. The investigator was not known to families, and several of the family therapists suggested that this anonymity made recruitment more difficult. Another factor, the topic of the study, i.e., an investigation of family relationships, may have been threatening and

perceived as intrusive. Several researchers and clinicians have commented on the utmost need anorectic families have to maintain a public appearance of well being and harmony at all costs (Bruch, 1977; Minuchin et al., 1978; White, 1983). Finally, one participant expressed that families may have experienced a great deal of stress over the child's illness. The feelings of guilt associated with a psychiatric diagnosis were overwhelming, and tparticipation in this study represented one more stressor.

Characteristics of the Sample

The Eating Attitudes Test (EATS) was distributed to all adolescent subjects to substantiate the anorexia nervosa diagnosis. Mean scores on the EATS were 19.33 for anorectic subjects and 10.33 for control subjects. The range of scores for control subjects was 3 to 20 while the range of scores for anorectic subjects was 11 to 31 with a score of 30 or greater considered symptomatic for an eating disorder.

Anorectic Subjects

Four anorectic subjects participated in this study, three females and one male. Data collected from the male anorectic was not included in any of the primary data analysis because his responses were quite different from his female counterparts and seemed to follow a gender-specific response set. Of the three remaining female anorectic subjects, ages ranged from 13 to 16 years. Two of the three subjects were Caucasian and one subject was Mexican American. All subjects came from intact families with two to four siblings. Most of the siblings

were sisters (four sisters, one brother). Two subjects were the youngest in the family while one subject was the second of four children. Two subjects were high school students while one subject attended junior high school.

All three anorectic subjects guessed that they would eventually marry. Two of the subjects were unsure whether or not they would like to have children but one subject hoped to have a large family. All anorectics hoped to be at least in their mid-twenties before having children. All of these subjects considered their present families to be financially comfortable, and all three adolescents had grown up in a small city or suburb. One subject was Catholic, one subject was Jewish, and one subject considered herself as not having a religious affiliation. For the two subjects who identified themselves as having a religious affiliation, both considered themselves to be moderately religious.

The time interval since diagnosis varied from 7 to 20 months. Only one adolescent had been hospitalized for treatment of anorexia nervosa; the other two subjects had been treated for anorexia solely on an outpatient basis. All three anorectics had been involved in both individual and family therapy, with a minimum of six months therapy duration. All anorectic subjects were considered by parents to be improved, with two subjects considered by their parents to be of average weight and one slightly below average. Anorectic subject scores on the EATS supported the parents' evaluation in two cases;

however, one adolescent scored above 30, suggesting that she continued to be highly symptomatic despite her improved condition.

Parents of Anorectic Daughters

Parents described all three anorectic subjects as good or excellent students. Parents rated two of these subjects as having active social involvements with peers while one subject was rated as having poor peer relationships. Two anorectics were rated by parents as having a close relationship with the family while one adolescent was rated as having a strained relationship with her family.

Mothers. Mothers' ages ranged from 41 to 46; two mothers were Caucasian, and one mother was Mexican American. Two mothers were youngest children in their families of origin and one mother was an only child. All three mothers had been raised in intact families, and only one mother had lost a parent through death. Two of the mothers reported that they presently lived over 1,000 miles from their own parents, and one mother lived within the same large metropolitan area as her parents. Of the two mothers who lived over 1,000 miles from parents, one mother maintained weekly contact with her parents and the other mother maintained monthly contact. In contrast, the mother who lived closest to her parents maintained contact only on holidays and special occasions. One mother considered her parents to have been comfortable financially while she was growing up, yet the other mothers considered their parents to have been less than well off. Two

mothers had grown up in small cities and one mother had been raised in a large city.

All mothers considered themselves to be comfortable financially, and all the mothers considered themselves to be strongly or moderately religious. Each mother had earned a college degree and one mother had completed some graduate work. All the mothers had been involved in family therapy and two of the mothers reported involvement in other psychotherapy experiences. One mother considered her relationship with her daughter as close; one viewed the mother-daughter relationship as strained; and one mother did not respond to the questionnaire item.

Fathers. Only two fathers, ages 43 and 44, participated in this study. Both fathers were Caucasian and both fathers had three other siblings. One father was a middle child and one father was the youngest child. Both fathers had been raised in intact families, and both described their families as less than well off financially. Both men had grown up in cities, and both had lost one or more parents. No parent contact was maintained by either father. Both considered themselves to be religious; one father was Protestant and one father was Catholic. Both fathers had attended college, but only one father earned a degree. One father considered his family as presently less than well off and one father considered his family as moderately well off financially. Both fathers had been involved in family therapy, and both rated their relationships with their daughters as close.

Control Subjects

Five female adolescents, ages 13 to 17, who were not diagnosed as anorectic participated in this study. All five young women were Caucasian. Three of the girls were oldest children and two girls were youngest children in their families. Of the three control subjects who provided useable data for this study, each had one brother. These young women were more likely to have male siblings than anorectic subjects, a trend or pattern which has been reported in other studies showing a greater proportion of female siblings in the anorectic family (Bruch, 1983; Hall, 1978). Two of the five girls came from families in which parents had divorced, and one of the girls lived with her mother and stepfather while one lived with her single mother and maintained some contact with her father. One young woman considered her family less than well off, one young woman considered her family as financially comfortable and three young women considered their families moderately well off. All five girls expected to marry but one girl did not wish to have children, one girl hadn't decided, two girls hoped for two children and one girl hoped for a large family. All five girls thought they would be at least 25 before they had children.

Testing the Research Questions

Research Question 1

The first research question asked if the physical placement of symbolic figures by each member of the anorectic family (father, mother and daughter) would demonstrate a closer emotional bonding between mothers and daughters as compared to fathers and daughters (see Table

1). As anticipated, anorectic subjects and their fathers placed the felt figures representing the mother and the daughter closer together than figures representing the father and the daughter (see Table 1). The pattern for figure placements was not replicated by mothers, who placed figures of the father and the daughter closer together than the figures of the mother and daughter.

Research Question 2

The second research question asked if the physical distances used in placement of symbolic figures by each family member (father, mother, and daughter) would demonstrate a more distant placement of the figures representing the two parents or marital dyad than the distance placement of the mother-daughter figures (see Table 1). Only the mothers placed the husband and wife figures in a more distant position than mother-daughter figures. Additionally, the total family distance used by all family members during figure placement tasks suggested that mothers placed all figures closer together than did fathers or daughters.

Research Question 3

The third question asked if there would be differences in the symbolic figure placements of anorectic subjects as compared with figure placements made by similar aged, non-anorectic subjects. Several differences between anorectic and non-anorectic subjects' figure placements were found (see Table 2). Overall, control subjects placed the figures of the mother and the daughter closer together than

Table 1
Mean Value Comparisons of Physical Distances
Measured by the Figure Placement Technique
of Anorectic Family Members

Persons	Distances			
	Mother-Father	Mother-Daughter	Father-Daughter	Total family
Father's placement (N = 2)	4.37	5.01	6.13	15.51
Frequency statistics	V = 3.50-5.25 Median = 4.37 SD = 0.87	V = 2.01-8.01 Median = 5.01 SD = 3	V = 4.50-7.76 Median = 6.13 SD = 1.63	V = 15.02-16.01 Median = 15.51 SD = 0.49
Mother's placement (N = 3)	3.86	3.66	2.43	9.97
Frequency statistics	V = 3.50-5.25 Median = 4.73 SD = 0.58	V = 2.13-6.37 Median = 3.79 SD = 1.92	V = 1.5-3.25 Median = 2.37 SD = 0.72	V = 8-12.75 Median = 10.37 SD = 2.02
Daughter's placement (N = 3)	3.86	4.93	6.57	15.46
Frequency statistics	V = 2.50-4.96 Median = 3.73 SD = 1.06	V = 2.46-7.82 Median = 5.14 SD = 2.23	V = 5.84-7 Median = 6.42 SD = 1.11	V = 13.75-18.62 Median = 16.18 SD = 2.24

Table 2

Mean Value Comparisons of Physical Distances Measured by Figure
Placement Techniques for Anorectic and Control Subjects

Persons	Distances			
	Mother-Father	Mother-Daughter	Father-Daughter	Total family
Control subject (N = 3)	4.38 V = 3.50-5.83 Median = 4.66 SD = 1.03	3.51 V = 2.50-4.19 Median = 3.34 SD = 0.74	7.41 V = 6.18-11 Median = 8.59 SD = 2.25	15.39 V = 12.48-21.02 Median = 16.84 SD = 4.10
Anorectic subjects (N = 3)	3.86	4.92	6.57	15.46

the figures of the parents. In contrast, the anorectic subjects placed the parent figures closer together. It was noted that both anorectic and control subjects placed the father and daughter figures furthest apart. In regard to the total family distance of placed figures, the anorectic and control subjects used a similar family distance.

Research Question 4

The final research question asked if the physical distances obtained in the symbolic figure placement task would correspond to scores on two scales measuring intimacy in dyadic relationships. The results indicated that scale scores corresponded with obtained physical distances for anorectic and non-anorectic subjects and fathers (see Table 3). In all these cases, lower scale scores, or more intimate scores, corresponded with smaller physical distances across figure placements. This pattern did not hold true for the distances and scale scores for mothers. Mothers rated their relationship with their husbands as more intimate than their relationship with their daughter on both scales, but the obtained distances for figure placements indicated that the mother-daughter relationship was somewhat closer than the marital or mother-father relationship. Mothers tended to place the daughter figure between the parent figures.

Table 3

Figure Placement Means Compared to Scale Mean: Scores of
Fathers, Mothers, Anorectic and Non-Anorectic Daughters

Research Method	Mother-Father	Mother-Daughter	Father-Daughter
Fathers' Placement and Scale Scores (N = 2)			
Figure placement	4.37	5.01	6.13
Interpersonal inventory	0.83		1.32
Relationship assessment tool	0.27		0.43
Mothers' Placement and Scale Scores (N = 3)			
Figure placement	3.86	3.66	2.43
Interpersonal inventory	0.75	1.27	
Relationship assessment tool	0.16	0.67	
Anorectic Daughters' Placement and Scale Scores (N = 3)			
Figure placement	3.83	4.92	6.57
Interpersonal inventory		0.97	1.74
Relationship assessment tool		0.36	1.51

Table 3, Continued

Research Method	Mother-Father	Mother-Daughter	Father-Daughter
Non-Anorectic Daughters' Placement and Scale Scores (N = 3)			
Figure placement	4.38	3.15	7.81
Interpersonal inventory		2.39	2.78
Relationship assessment tool		2.42	2.93

CHAPTER 5

DISCUSSION

Discussion of Findings on Research Questions

Conclusions in regard to each of the research questions must be considered only suggestive in light of the small sample size. However, study findings have highlighted some interesting trends.

Research Question 1

The findings on this question supported reports of clinical observations that anorectic adolescents perceive themselves emotionally closer to their mothers than their fathers. Figure placements made by fathers also supported literature reports of clinical observation. In contrast, mothers placed the figure of the father closer to the figure of the daughter than to the figure of themselves. This pattern may be a peculiar or unusual effect owing to the small sample size. Mothers' placements may also reflect a perceived dimension other than closeness of emotional bonds.

Both anorectic subjects and mothers placed figures representing dyads in which they were not involved closer together than dyads in which self-referent figures were included. Perhaps this placement supports the dynamic phenomenon of triangulation or "three-way matrimony" (Selvini-Palazzoli, 1978) in which each involved individual secretly feels left out with the other two individuals knit together in

a tight alliance. For example, the father and daughter were perceived by mothers as aligned together in a secret coalition. Further support for the phenomenon of triangulation was provided by the investigator's observation that the fathers' and daughters' figure placements were identical but the figure placements made by mothers were quite different. On the other hand, mothers may, in fact, perceive their daughters as identifying more with their fathers than with themselves.

Mothers' different figure placements also may portray oedipal issues in which the daughter is perceived as a sexual rival threatening the marital relationship. Crisp (1970) suggested that parents of anorectic daughters may experience their daughters' emergent sexuality as destructive to their families and themselves. In contrast, the daughter may experience her own sexuality as a threat to the family unit which may lead to a desire to retreat from maturity. Garfinkel and Garner (1982) suggested that the daughter's sexual maturity also may potentiate disturbed sexual attitudes in one or both parents. Sours (1969) noted that developmental histories of anorectic children given by the mother were surprisingly lacking in report of any Oedipal phenomenon, except for reports of separation anxiety when the child first went to school. He commented more on the mothers' reports of their own anguish at this separation; thus, the anorectic adolescent may not have dealt with Oedipal issues during the appropriate developmental phase. When these issues reemerge naturally with puberty (Sours, 1969), the issues may be even more disruptive for the adolescent and her mother due to a previous lack of conflict

resolution. Finally, as the adolescent begins to recover from anorexia, Oedipal issues again reassert themselves within the family such that parents' psychoneurotic morbidity increases following restoration of their daughter's weight (Crisp et al., 1974). Indices of maternal anxiety and paternal depression have been noted during this time, particularly when the marital relationship was unstable prior to the daughter's weight restoration.

Both daughters and fathers placed the figures of fathers and daughters further apart than any other dyad. Little has been written about the father-daughter relationship in regard to anorexia nervosa, and what has been described as the phenomenon of emotional closeness/distance is quite variable. Cobb (1943) perceived the typical father as passive, yet Kay and Leigh (1954) described fathers as easy-going and quick tempered. Dally (1969) described 21% of fathers as weak and remote, 17% as passive, 5% as domineering and aggressive, 8% as domineering but not aggressive, and 4% as psychopathic and unreliable. Wold (1973) suggested that fathers of anorectic daughters focused a great deal of hostility onto their daughters. He noted that daughters were viewed by fathers as similar to their own mothers, who were described as domineering and intolerant of any expression of anger from their sons. In turn, the fathers were unable to express their anger toward their wives who, unlike daughters, were fragile and likely to fall apart. Several case studies were described in which weight loss and gain by the daughter paralleled the father's involvement in family therapy. The question here is whether the reciprocal distance

portrayed between the father and daughter is a normal result of gender identification or an expression of disengagement.

Research Question 2

The findings in regards to question #2 are mixed because the expected physical distance between husband and wife figures predicted by the literature was not clearly evident. Both fathers and daughters placed figures within the marital dyad closer together than figures within other dyads. In contrast, the mothers placed the marital dyad slightly more distant than the mother-daughter dyad and much more distant than the father-daughter dyad. This placement pattern may suggest that, at least for mothers, there is a lack of identification with the husband and/or the marital relationship. The pattern also suggests that mothers perceive a slightly stronger identification with the role of mother.

Verbal comments made by mothers also supported the closer placement of mother-daughter figures than mother-father figures. For example, comments focused on mothers' protective function with regards to their daughters, and explanations were provided regarding why the daughter figures were placed between the parental figures. One wonders why this same characteristic placement of closer parent-child figures rather than marital dyad figures is not made by fathers. Perhaps fathers are less involved in parenting than mothers. The discrepancy between the figure placements of the parents also suggests a lack of reciprocity between their views of the family with some evidence of emotional breakdown in the marital and parental subsystem

functions. This lack of reciprocity is described clearly in the studies conducted by Minuchin et al. (1978).

Research Question 3

Findings comparing the placements of anorectic and similarly aged non-anorectic subjects illustrated that non-anorectic subjects portrayed their relationship with their mothers as closer than their anorectic counterparts. Non-anorectic adolescents placed the marital dyad figures further apart than did anorectic adolescents, and placement of father-daughter figures for the non-anorectic adolescents were even further apart than figure placements of the father-daughter dyad made by anorectic adolescents. Finally, non-anorectic adolescents used similar distances in their overall figure placements than did the anorectic adolescents.

The study finding that anorectic subjects placed mother and daughter figures further apart than did non-anorectic adolescent subjects is somewhat of a surprise, considering the strong emphasis placed on the overly close, almost symbiotic relationship described in the literature for mother-daughter relationships in anorectic family systems. Perhaps a loosening of the emotionally enmeshed bond was already an outcome of family therapy since the anorectic subjects had been involved in family therapy a minimum of six months. Perhaps this finding reflects stronger feelings of ambivalence in the anorectic-mother relationship by the daughter. It seems clear that even 16-year-old, non-anorectic adolescents maintain a fairly intense, reciprocal

identification with their mothers. In contrast, this pattern of emotional bonding is quite different with fathers.

The finding that non-anorectic adolescents placed more distance between the marital dyad than did anorectic subjects also is somewhat surprising. Perhaps conflict between parents is more open to observation in non-anorectic families or the non-anorectic daughter's ability to more accurately project the match between the family's public and private image is seen in these placements. There is the possibility that placements by the anorectic subjects were influenced by issues of social desirability leading them to portray an idealized picture of their parents' relationship rather than a real or actual picture.

Both groups of adolescent girls utilized the most distance in the placement of figures representing father and daughter. The observed distance may be an issue of gender identification with a closer identification with mothers. The distance also may be an issue of separation or individuation, with daughters moving away from their fathers as they become more involved with peers, particularly male peers. Because it is not uncommon for issues around sexuality to become conflictual between fathers and daughters, especially during adolescence, defenses against incestual feelings may cause emotional distancing in the relationship and issues of control may lead to conflict (Benedek, 1970).

Study results have not found that anorectic subjects used less physical space in their total family figure placements as compared with

non-anorectic adolescent subjects. Figures for both subject groups generally were clustered close together with the least distance noted between the mother-daughter relationship. The figure placements of non-anorectic subjects used more distance for the mother-father and the father-daughter relationship than anorectic subjects, a finding which lends some support to the conceptualization of an enmeshed anorectic family system.

An alternative explanation for the findings of family enmeshment is made by Yager (1982) who suggested that the stress caused by the daughter's illness may cause the family to appear exceptionally enmeshed. Family members attempt to increase family cohesion as a defense against crisis.

Under stress exaggerated response patterns representing family members' defensive operations emerge in bold relief, whereas in less stressful situations such families may not appear to be so pathological. . . . Given the ambiguity regarding the causes of the syndrome, parental guilt is virtually inescapable. Parents imagine every possible act that they might have done to cause it: they wonder about the dreadful damage they brought upon the child through misguided ignorance or unavoidable misfortune, they wonder if the other parent is to blame or if they are still acting in a harmful way. (Yager, 1982, pp. 47-48)

As Yager noted, the whole family's response to stress has not been well studied, and possibly many other stressful conditions experienced by families during the life cycle may elicit a similar response pattern of emotional overbonding or enmeshment. It would be helpful to study such patterns over time, as enmeshment may be an initial family response to stress, and disengagement may be an extended family response to chronic stress.

The anorectic families in this study all have been involved in family therapy, and by their self-report have seen some improvement in their daughter's conditions. Would the pattern of enmeshment be more evident at the time of diagnosis? What pattern of emotional bonding would be seen in families where the anorectic child adopts a more chronic identity?

Research Question 4

Scores on the two scales corresponded with the measured figure placement distances between all family dyads for anorectic and non-anorectic adolescents and fathers. Mothers' scale scores did not correspond with the measured distances between figures because scale scores indicated greater intimacy between the marital dyad yet figure placements reflected greatest emotional closeness within the mother-daughter dyad. This finding suggests that for mothers the projective measure of figure placement may have tapped issues other than closeness in emotional bonding or intimacy.

Two of the three mothers placed the figures of daughters between the two parent figures. Both mothers who placed the daughter in the central position commented extensively on their desire to protect their daughter from pressures and problems originating outside the family. Thus, it may be that the central placements of daughter figures reflects another characteristic of the anorectic family system, overprotectiveness. "Closely related to the enmeshment of anorectic families is overprotection. An enormous concern for others' well-being is usually coupled with a great fear of the outside world" (Minuchin et

al., 1978, p. 68). Overprotection also may serve as a mechanism of detouring marital conflict by uniting the marital partners in concern over the child while suppressing any strife or differences. Minuchin (1978) emphasized that protection can serve as a guise for issues of control and scapegoating which maintain the symptoms of the child. "Feeling both protected and scapegoated, the child approaches all interpersonal situations as a weak, incompetent person. . . . Her dependent demands increase and family members respond by increasing their protective control" (Minuchin et al., 1978, p. 6).

Placements of the daughter in a central position by mothers also may reflect a reemergence of Oedipal issues, especially as the daughter's condition improves and sexuality reasserts itself. Obviously, the small sample size [$N = 3$] of mothers severely limits the conclusions which could be drawn from these findings. However, one must question most strongly the validity of symbolic figure placement as a "clean" and efficient measure of emotional bonding for mothers in the anorectic family because of the discrepancy between scale scores and figure placement distances.

Additional Findings

Response to Projective Measure. After completing the figure placement task, individuals were asked to comment on or explain their placement of figures. Most notable were verbal responses elicited from mothers in regards to the figures placed in a central position. One mother commented on her placement of the father figure in a central position, saying "I put him between us. He is our support and

strength." The other two mothers commented on the placement of the daughter figure in the central position. One stated, "We [father and mother] both protect her. It would look different if I included my other daughter, too." Another commented, "We [father and mother] protect her against what is out there in the field" [remainder of the felt board], it doesn't mean that we [father and mother] are not close." When one mother repeated her placement to show her anorectic daughter, the daughter remarked on the daughter figure being placed in the central position, saying "I'm the buffer between you [father and mother]." These remarks suggest that the central position in the figure placement may be of particular significance to anorectic family members.

Although not included in the primary data of the study, the figure placement made by the mother of a male anorectic subject was quite different from the figure placements of mothers with anorectic daughters. The mother became tearful after completing the figure placement task in which she had placed her son far away from the other figures representing herself and her husband. She had placed the self-referent figure in the central position and stated, "This is how it is right now, it used to be worse." She then spontaneously produced a second figure placement, stating, "This is how I would like it to be." This figure placement revealed figures more closely clustered together, with the figure representing the father now placed in a central position. She continued to express her distress in regard to the conflicts between her son and husband. Not too surprising following

this commentary was the outcome of the son's placement which reflected the mother figure in a central position and a full six inches between the self-referent figure and the figure of the father.

The mothers in this study appeared quite concerned about issues related to the study. On most occasions, the mothers spent time with the investigator following data collection asking questions regarding the investigator's experience in the treatment of anorectic adolescents. Specifically, concerns were expressed regarding whether their daughters' behaviors represented normal adolescent issues or issues related to anorexia nervosa. Mothers readily expressed their guilt and need for reassurance and support. It appeared that the symbolic figure placement task mobilized strong emotional responses for the mothers.

Very few comments were made by the anorectic subjects and their fathers. Most anorectics responded that they did not have a particular reason for their figure placements. One anorectic subject insisted that her placement was made because "that's the way it looks the neatest." Two non-anorectic adolescents not included in the primary data analysis commented on their placements in regards to the father figures. Fathers were placed at large distances from the mother and daughter figures. One commented, "I'm closer to my mom. The more I fight with him the closer I get [to mother]." Another non-anorectic commented, "That's just the way it is. I'm not close to my step-father." Not surprisingly, both these control subjects had divorced parents, and it appeared that their figure placements reflected disengagement from father figures. Because these two

subjects were not members of intact family systems and their responses seemed to highlight this difference, both subjects were not included in the primary data analysis.

Additional Observations Regarding Figure Placements. Although the placement order of the figures was not a primary focus of this study, some suggestive trends were observed. Four of the five non-anorectic girls placed figures in order of Father, Mother, Daughter, yet this order of figures was not observed in placements made by anorectic girls. In fact, the anorectic subjects placed figures in order of Daughter, Mother, Father. Klopper et al. (1978) suggested that both horizontal order and the vertical position of figures represented another dimension of the family system related to issues of power, dominance, and control, and labeled this dimension "prominence." In regards to the vertical order of figure placements made by anorectic family members, all family members with the exception of one anorectic daughter, placed family figures on the same vertical level or placed the daughter figure in a slightly elevated position. This configuration was observed in the placement of only one non-anorectic adolescent, not included in the primary data analysis, who also happened to be the young woman with an elevated score on the Eating Attitudes Test. Klopper et al. (1978) demonstrated that prominence measures obtained from figure placements were significantly correlated with other known measures of this power and control dimension at the $p \leq .01$ level.

These observations of figure prominence suggest that the position of the anorectic daughter in her family may be a powerful and

controlling one. Mothers of anorectic daughters may be particularly susceptible to this perception as evidenced by the placement of self-referent figures at the lowest vertical position. The elevated figure placement also suggests that the daughter can be elevated into the parental subsystem. This diffuseness of parent-child subsystem boundaries may compromise the executive functions of the parent subsystem as well as the ego boundaries between family members. Minuchin et al. (1978) has described this lack of family ego boundaries as a subsystem dysfunction which lends itself to cross-generational coalitions. In this situation, "distance between spouses is maintained without violating the family's value for proximity and the child is drawn into conflict-avoidance patterns" (p. 6).

The additional observation regarding power and control or prominence may shed light on the discrepancy observed between mothers' placements and their obtained scale scores. Perhaps mothers' placements are more reflective of issues of control, with fathers and daughters perceived as aligned in a coalition. Mothers remained in a powerless position in the family system, feeling rejected and left out. They may threaten to overtly withdraw from the parental subsystem, preferring the safety of the child subsystem. This withdrawal may be particularly true if mothers, as has been suggested by White (1983), retain a strong coalition with their own mothers. As noted earlier, all non-anorectic adolescents, with one exception, did not place self-referent figures in an elevated position by horizontal or vertical order. In fact, all five girls placed the father figures in an ordinal

and elevated position. Vertical distances used by non-anorectic girls (Mean = 3.00 inches) compared with anorectic subjects (Mean = 2.16 inches), mothers (Mean = 0.66), and fathers (Mean = 0.50 inches), suggest that anorectic family members use less vertical as well as horizontal space in figure placements. Results from this small sample suggest that the symbolic figure placement task might offer an interesting measure of prominence in family relationships and offers potential information regarding subsystem functioning in normal and disturbed family systems.

A final observation in regards to subject responses to the figure placement task was the selection by subjects of figures to represent family members. Although most subjects selected a large male figure to represent the father, a large female figure to represent mother, and a smaller female figure to represent daughter, there were several exceptions to this pattern within the anorectic family sample. One anorectic girl chose a large female figure to represent herself and a smaller figure to represent her mother. One father chose two small female figures to represent his wife and daughter. The male anorectic subject, not included in primary data analysis chose two smaller male figures for himself and his father and a larger female figure to represent his mother. These exceptional, clearly defined responses may reflect issues of prominence, lack of personal ego boundaries and issues related to body image distortions common to anorectic adolescents (Garfinkel & Garner, 1982).

Responses to Interpersonal Inventory (Fischer-Narus Intimacy Scale). It was noted that many subjects found the directions on this scale quite confusing. The instructions asked the subject to respond to a series of statements regarding their relationship with another family member. Mothers, in particular, seemed confused about how to respond to the scale and wanted clearer directions on how they should answer--from their own perspective of the relationship or from the perspective of the other family member. Rather than difficulty with the instructions, the adolescents had difficulty with the vocabulary, in particular, words like "thwart," "reconciliation," "mutually," and "vacillation." In the future, these terms need to be reworded if this scale is to be used again with adolescents.

Responses to the Eating Attitudes Test. One of the non-anorectic adolescents, not included in the primary data analysis, had the highest score on the EATS of any adolescent subject. During the data collection process, this adolescent shared with the investigator that she was diabetic. It is unknown whether the subject had an undiagnosed eating disorder or if issues surrounding food, weight, and calorie control are similar for juvenile diabetics and eating disorder adolescents. Further psychometric testing of this scale with diabetic adolescents and eating disorder clients seems indicated to secure better scale precision.

Summary of Findings

Findings in this study supported most of the previous studies and clinical observations regarding the anorectic family system.

Anorectic adolescents portrayed themselves as most closely bonded with their mothers, and the figure placements made by fathers supported this finding. Furthermore anorectic adolescents achieved scale scores suggesting closer, more intimate relationships with both their mothers and fathers than did non-anorectic adolescents. Finally, anorectic adolescents seemed to be somewhat more enmeshed and intensely involved in the family than non-anorectic adolescents.

Discrepancies were found in regards to the emotional bonding with the marital dyad of the anorectic family system. Anorectic subjects and fathers portrayed a close marital bond for each figure placement task and obtained scale scores corresponded to this same direction of intimacy. In contrast, mothers' placements differed from this pattern of scale score and physical distance agreement. Perhaps figure placements may reflect issues other than closeness in emotional bonding. Verbal responses by the mothers suggested that some of the other issues might include a reciprocal exchange between mother and daughter of protection and control of external family forces. This "externalization" of a need for protection is balanced by an internal exchange of buffering activities. In this manner, the mother-daughter dyad remains active, and issues within the marital dyad are ignored. It also has been suggested that mothers may identify more strongly with their role as mother than they identify with their role as spouse or marital partner.

What is not clarified by this study is the issue of whether or not these patterns of emotional bonding are a reflection of

characteristic dynamics associated with the anorectic family system or a systemic family response to the stress of a daughter's illness. With the exception of responses made by mothers, the obtained scale scores lent support to the symbolic figure placement task as a valid measure of closeness/distance in emotional bonding within family systems relationships. Observations regarding the horizontal and vertical order of figure placements suggested that symbolic figure placement also may be a useful measure for assessing prominence within anorectic family relationships.

Recommendations for Future Studies

The study should be repeated with a larger sample size. Ideally the new study also would include parents of non-anorectic adolescents. It also would be desirable to control variables which might confound results including subject's body weight and level of symptomatology, length of time in treatment, and presence of bulimic behaviors versus more restrictive behaviors for the anorectic subjects.

To make data collection less intrusive and, thus, less likely to meet with resistance from families, an adaption of the symbolic figure placement technique should be made allowing family members to participate in the study without face to face contact with the investigator. Several investigators have accomplished this task by scaling down figures which could be cut out of gum-backed paper and using a blank sheet of paper as the field of placement. Subjects would be asked to label each figure after the placement (Fisher, 1966; Guardo, 1969; Meisels & Guardo, 1969). The proposed adaption not only

would enable the investigator to gather data from large groups without one-to-one contact but also provide a permanent record of each figure placement. The questionnaire and figure placement task could be filled out prior to the family appearing for a family therapy session. Researchers would not have to meet families in their homes, and data collection would be easier and considerably more time efficient.

Figures representing all family members should be incorporated into the figure placement task. This change would offer additional information regarding the parents' emotional relationship with other children as well as the anorectic's perceived emotional position in regards to her siblings. In addition, including extended family members, particularly grandparents, in the figure placement task would offer additional information regarding cross-generational bonding patterns suggested as significant issues in the etiology of anorexia nervosa by several investigators (Minuchin et al., 1978; Selvini-Palozzoli, 1978; White, 1983; Wald, 1973).

Use of the symbolic figure placement task to measure the dimension of "family prominence" within the family system must be explored further. Providing the psychometric testing "holds up" in the expected direction, the figure placement task may offer an objective measure of family issues such as dominance, power, influence, and control. These issues may impact on subsystem boundaries and function.

Instructions of the figure placement task could be made to be more specific so as to reduce the chance that other issues might contaminate results. For example, "Place these figures on the board

(or paper) in a way which shows how close you feel to the different people who make up your family." These instructions might sacrifice the projective nature of the tool but, in turn, could improve the accuracy, reliability, and objectivity of test results. Furthermore, these more precise directions may provide a second contrasting data point for subjects who completed the figure placement task using both sets of directions: (1) no verbal cues for "closeness" and (2) a verbal cue of emotional closeness or "close."

It would be informative to measure figure placement distances of various family members at different points in the course of psychotherapy. Across time, results might be helpful in charting the family's response(s) to stress as well as the family's response to therapeutic interventions. Comparisons of measurements of families in which there has been improvement in the condition of the anorectic child and families which include a child who has developed a different chronic eating disorder would offer useful information to the present literature on anorexia nervosa.

It may be enlightening to utilize this method of figure placement to study other family systems in which the illness of one member is thought to play a role in the dynamics of the family system. Some suggestions include families with a bulimic or morbidly obese member, families with a chronically mentally ill member, and families in which alcoholism, substance abuse and family violence is an issue.

Finally, it might be interesting to compare results on the Eating Attitudes Test of juvenile diabetics to those of eating

disordered adolescents. It seems that many of the same issues are present in both conditions, including concerns regarding body image, issues on intrapersonal and interpersonal control, and a focus on food and calories.

APPENDIX A
FISCHER-NARUS INTIMACY SCALE
(Interpersonal Inventory)

Consider the relationship you have with your _____ and answer the following statements according to how much you agree this is true of your relationship. Use this scale:

- | 1 | 2 | 3 | 4 | 5 | 6 |
|---|--------------------------|------------------------|---------------------|--|---------------------|
| strong
disagreement | moderate
disagreement | slight
disagreement | slight
agreement | moderate
agreement | strong
agreement |
| ___ 1. There is some hedging, alibing, or exaggerating regarding you or _____. | | | | ___ 14. There is an absence of discussion with each other and/or remoteness with each other. | |
| ___ 2. There is little desire to know much about each other. | | | | ___ 15. Problems between you almost always end up in destructive actions and/or resentments. | |
| ___ 3. There is intentional deceit, lying, and marked hostility. | | | | ___ 16. There is a willingness to acknowledge errors. | |
| ___ 4. You can rely on each other to willingly share information regarding each other. | | | | ___ 17. Problems almost always end up with reconciliations, compromises, and mutually satisfying solutions. | |
| ___ 5. There is much honesty, self-disclosure, and openness. | | | | ___ 18. There are feelings of a need to try harder. | |
| ___ 6. There is a willingness to listen and to learn. | | | | ___ 19. There are unrealistic restraints imposed by the other. | |
| ___ 7. While together you become aware only of your thoughts and feelings. | | | | ___ 20. There is unwillingness to allow the other a sense of self-identity and independence from dictatorial control. | |
| ___ 8. While together you tend to become displeased, tense, and/or irritable. | | | | ___ 21. There are few feelings of obligation and self demands with regard to the other. | |
| ___ 9. While together, you tend to be generally aware and sensitive regarding each other. | | | | ___ 22. There is personal autonomy and respect for each other's choices. | |
| ___ 10. While together you tend to be pleased, hopeful, and/or relaxed. | | | | ___ 23. There are inappropriate self-expectations (too high or too low) through lack of recognition of assets and abilities. | |
| ___ 11. There is competition to be right. | | | | ___ 24. There is little help but lots of criticism. | |
| ___ 12. There is dedication and unswerving loyalty in the relationship. | | | | | |
| ___ 13. There are needs to thwart, frustrate, or displease the other. | | | | | |

1	2	3	4	5	6
strong disagreement	moderate disagreement	slight disagreement	slight agreement	moderate agreement	strong agreement

- ___ 25. Appropriate recognition is being withheld or credit is stolen for efforts and achievements.
- ___ 26. There is a sense of failure and worthlessness in this relationship.
- ___ 27. There are mostly appropriate self-expectations through appropriate recognition of assets and abilities.
- ___ 28. There are helpful suggestions, encouragements, and/or occasional kicks in the pants.
- ___ 29. There is sincere appreciation and meaningful acknowledgements.
- ___ 30. There are feelings of worth, respect, and acceptance.
- ___ 31. There is a view of life and others as of little worth or promise.
- ___ 32. There is hesitancy to give.
- ___ 33. There is alienation, a sense of being alone.
- ___ 34. There is a view of life and others as worthwhile and positive.
- ___ 35. There is generosity and consideration.
- ___ 36. There are attempts to give even before being asked.
- ___ 37. There is ease in receiving from each other.
- ___ 38. There is vacillation between support and no support, consideration and inconsideration, and/or loving and lack of loving.
- ___ 39. The welfare of those outside the relationship and/or outside responsibilities come first.

APPENDIX B
RELATIONSHIP ASSESSMENT TOOL

RELATIONSHIP ASSESSMENT TOOL

DIRECTIONS: The list below is made up of words representing two opposites. Put an "X" in the space between the two words which best portrays your feelings about your relationship with your _____.

WEAK	_____	STRONG
FULL	_____	EMPTY
DEEP	_____	SHALLOW
FAR	_____	NEAR
WARM	_____	COLD
REJECTION	_____	ACCEPTANCE
DISINTEREST	_____	INTEREST
UNSELFISH	_____	SELFISH
LOVE	_____	HATE
ADMIRE	_____	DESPISE
UNCARING	_____	CARING
ACTIVE	_____	PASSIVE
SEEKS OUT	_____	AVOIDS
INCREASING	_____	DECREASING
NONSUPPORTIVE	_____	SUPPORTIVE

APPENDIX C
DEMOGRAPHIC QUESTIONNAIRE FOR PARENTS
AND ADOLESCENT SUBJECTS

70 71 72 73 74 75 76 77 78 79

INSTRUCTIONS: In the section, YOURSELF, please describe your background by writing the number of the one choice to each item which best describes you in the space at the left. In the section, YOUR CHILD, please describe your child's background by writing the one choice to each item which best describes child in the space at the left. There are no answers which are better than any other answers, the best answer is the one that comes the closest to describing you or your child.

EXAMPLE

____ Your favorite dessert is:

1. ice cream
2. cake
3. pie
4. fruit
5. cheese

If your favorite dessert is cake you would write "2" in the space to the left.

Please work quickly and accurately. Do not dwell on any item, but please answer every item. If you are not sure, try to answer to the best of your ability.

____ 1. YOUR SELF

Your sex

1. Male
2. Female

____ 2-3. Your age -- write in.

____ 4. Your race/ethnic background:

1. Black/Negro
2. Chicano/Mexican American
3. American Indian
4. Oriental
5. White/Caucasian
6. Other (specify) _____

____ 5-6. Number of brothers -- write in.

____ 7-8. Number of sisters -- write in.

____ 9-10. What order were you born?

1. Only child
2. First born
3. Middle child
4. Last born

____ 11. With whom did you live the majority of the time when you were growing up?

1. Both parents
2. Single parent
3. Other (specify)

____ 12-13. What is your best guess about your future marital status?

1. Married
2. Separated
3. Divorced

____ 14-15. How long have you been married -- write in.

____ 16. Which of the following best describes your parents' present marital status?

1. Original/adoptive parents live together
 2. Separated or divorced
 3. One or both deceased
- ____ 17. How old were you when your parent's marriage ended?
1. It did not end
 2. Birth - 5 years
 3. 5 - 10 years
 4. 10 - 15 years
 5. 15 - 18 years
 6. 18 - 25 years
 7. Older than 25

____ 18. Number of children -- write in.

- ___19. If you could have just what you want, how many children would you like to have?
 1. Haven't decided
 2. none
 3. one
 4. two
 5. three or more
- ___20. How old would you like to be when you have your first child -- write in.
- ___21. How old would you like to be when you have your last child -- write in.
- ___22. Present religious affiliation or preference:
 1. Catholic
 2. Protestant/Christian
 3. Jewish
 4. Other (specify) _____
- ___23. To what extent do you consider yourself religious?
 1. Not at all
 2. Mildly
 3. Moderately
 4. Strongly
- ___24. Which best describes your parents' financial status when you were growing up?
 1. Not at all well off
 2. Less than well off
 3. Comfortable
 4. Moderately well off
 5. Very well off
- ___25. Which best describes your financial status?
 1. Not at all well off
 2. Less than well off
 3. Comfortable
 4. Moderately well off
 5. Very well off
- ___26. When you were growing up, were you primarily a resident of:
 1. Rural community or farm
 2. Small city/Suburb
 3. Large city
- ___27. How close do you live to your parents now?
 1. Live with them
 2. Within 1 mile
 3. Between 1 - 20 miles
 4. Between 20 - 100 miles
 5. Between 100 - 500 miles
 6. Over 1000 miles
 7. Cannot answer question
- ___28. How often do you have contact with your parents?
 1. Daily
 2. Weekly
 3. Monthly
 4. On holidays and special occasions
 5. Rarely
 6. Never
- ___29. Highest level of school completed:
 1. 8th grade or less
 2. 11th grade or less
 3. 12th grade or less
 4. Some college or trade school
 5. College degree
 6. Graduate work
 7. Graduate degree
 8. Post-graduate work
- ___30. What types of therapy have you been involved in?
 1. None
 2. Individual therapy
 3. Family therapy
 4. Marital
 5. More than 1 of the above
- ___31-32. Number of months involved in family therapy -- write in.
- YOUR CHILD
- ___33-34. Your child's age -- write in.
- ___35. Your child's birth order:
 1. Only child
 2. First born
 3. Middle child
 4. Last born
 5. Adopted (specify # of years ago)

- ___ 36. Your child's race/ethnic background:
1. Black/Negro
 2. Chicano/Mexican American
 3. American Indian
 4. Oriental
 5. White/Caucasian
 6. Other (specify)
- ___ 37. Highest grade in school:
1. 6th
 2. 7th
 3. 8th
 4. 9th
 5. 10th
 6. 11th
 7. 12th
- ___ 38. Your child's school performance:
1. Excellent student (mostly A's)
 2. Good student (mostly B's)
 3. Average student (mostly C's)
 4. Lower than average (mostly below C's)
 5. Does not attend school
- ___ 39-40. Number of month(s) since your child's diagnosis of anorexia nervosa -- write in.
- ___ 41. Types of treatment your child has recieved for anorexia nervosa.
1. Hospitalization (specify number of hospitalizations)
 2. Outpatient treatment
 3. Both
- ___ 42. Types of therapy your child has recieved.
1. None
 2. Individual therapy
 3. Group or family therapy
 4. Both individual and group/family
- ___ 43. Number of months your child was seen in therapy write -- in.
- ___ 44. Your child's present condition in relation to her anorexia is:
1. Fully recovered
 2. Improved
 3. Remained the same
 4. Deteriorating
- ___ 45. Your child's weight for her age/height is:
1. Above average
 2. Average
 3. Somewhat below average
 4. Significantly below average
- ___ 46. Your child's social involvement with peers could be describe as:
1. Active
 2. Average
 3. Poor
- ___ 47. Your child's relationship with your family lately has been:
1. Very close
 2. Close
 3. Strained
 4. Distant
- ___ 48. Your child's relationship with you lately has been:
1. Very close
 2. Close
 3. Strained
 4. Distant

70 71 72 73 74 75 76 77 78 79

INSTRUCTIONS: In the section, YOURSELF, please describe your background by writing the number of the one choice to each item which best describes you in the space at the left.

EXAMPLE

____ Your favorite dessert is:

1. ice cream
2. cake
3. pie
4. fruit
5. cheese

If your favorite dessert is cake you would write "2" in the space to the left.

Please work quickly and accurately. Do not dwell on any item, but please answer every item. If you are not sure, try to answer to the best of your ability.

- | | |
|---|--|
| <p>____ 1. <u>YOUR SELF</u>
Your sex
1. Male
2. Female</p> | <p>____ 12-13. What is your best guess about your future marital status?
1. Married
2. Separated
3. Divorced</p> |
| <p>____ 2-3. Your age -- write in.</p> | <p>____ 14-15. How long have you been married -- write in.</p> |
| <p>____ 4. Your race/ethnic background:
1. Black/Negro
2. Chicano/Mexican American
3. American Indian
4. Oriental
5. White/Caucasian
6. Other (specify) _____</p> | <p>____ 16. Which of the following best describes your parents' present marital status?
1. Original/adoptive parents liv together
2. Separated or divorced
3. One or both deceased</p> |
| <p>____ 5-6. Number of brothers -- write in.</p> | <p>____ 17. How old were you when your parent marriage ended?
1. It did not end
2. Birth - 5 years
3. 5 - 10 years
4. 10 - 15 years
5. 15 - 18 years
6. 18 - 25 years
7. Older than 25</p> |
| <p>____ 7-8. Number of sisters -- write in.</p> | <p>____ 18. Number of children -- write in.</p> |
| <p>____ 9-10. What order were you born?
1. Only child
2. First born
3. Middle child
4. Last born</p> | |
| <p>____ 11. With whom did you live the majority of the time when you were growing up?
1. Both parents
2. Single parent
3. Other (specify)</p> | |

- ___19. If you could have just what you want, how many children would you like to have?
1. Haven't decided
2. none
3. one
4. two
5. three or more
- ___20. How old would you like to be when you have your first child -- write in.
- ___21. How old would you like to be when you have your last child -- write in.
- ___22. Present religious affiliation or preference:
1. Catholic
2. Protestant/Christian
3. Jewish
4. Other (specify) _____
- ___23. To what extent do you consider yourself religious?
1. Not at all
2. Mildly
3. Moderately
4. Strongly
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2. Less than well off
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4. Moderately well off
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- ___26. When you were growing up, were you primarily a resident of:
1. Rural community or farm
2. Small city/Suburb
3. Large city
- ___27. How close do you live to your parents now?
1. Live with them
2. Within 1 mile
3. Between 1 - 20 miles
4. Between 20 - 100 miles
5. Between 100 - 500 miles
6. Over 1000 miles
7. Cannot answer question
- ___28. How often do you have contact with your parents?
1. Daily
2. Weekly
3. Monthly
4. On holidays and special occasion
5. Rarely
6. Never
- ___29. Highest level of school completed:
1. 8th grade or less
2. 11th grade or less
3. 12th grade or less
4. Some college or trade school
5. College degree
6. Graduate work
7. Graduate degree
8. Post-graduate work

APPENDIX D
EATING ATTITUDES TEST

EATING ATTITUDES TEST

Please place an (X) under the column which applies best to each of the numbered statements. All of the results will be strictly confidential. Most of the questions directly relate to food or eating, although other types of questions have been included. Please answer each question carefully. Thank you.

Always	Very often	Often	Sometimes	Rarely	Never		Always	Very often	Often	Sometimes	Rarely	Never	
()	()	()	()	()	()	1. Like eating with other people.	()	()	()	()	()	()	20. Wake up early in the morning.
()	()	()	()	()	()	2. Prepare foods for others but do not eat what I cook.	()	()	()	()	()	()	21. Eat the same food day after day.
()	()	()	()	()	()	3. Become anxious prior to eating.	()	()	()	()	()	()	22. Think about burning off calories when I exercise.
()	()	()	()	()	()	4. Am terrified about being overweight.	()	()	()	()	()	()	23. Have regular menstrual periods.
()	()	()	()	()	()	5. Avoid eating when I am hungry.	()	()	()	()	()	()	24. Other people think I am too thin.
()	()	()	()	()	()	6. Find myself preoccupied with food.	()	()	()	()	()	()	25. Am preoccupied with the thought of having fat on my body.
()	()	()	()	()	()	7. Have gone on eating binges where I feel that I may not be able to stop.	()	()	()	()	()	()	26. Take longer than others to eat my meals.
()	()	()	()	()	()	8. Cut my food into small pieces.	()	()	()	()	()	()	27. Enjoy eating at restaurants.
()	()	()	()	()	()	9. Aware of the calorie content of foods that I eat.	()	()	()	()	()	()	28. **Take laxatives.
()	()	()	()	()	()	10. Particularly avoid foods with high carbohydrate content (e.g. bread, potatoes, rice, etc.).	()	()	()	()	()	()	29. Avoid foods with sugar in them.
()	()	()	()	()	()	11. Feel bloated after meals.	()	()	()	()	()	()	30. Eat diet foods.
()	()	()	()	()	()	12. Feel that others would prefer if I ate more.	()	()	()	()	()	()	31. Feel that food controls my life.
()	()	()	()	()	()	13. **Vomit after I have eaten.	()	()	()	()	()	()	32. Display self control around food.
()	()	()	()	()	()	14. Feel extremely guilty after eating.	()	()	()	()	()	()	33. Feel that others pressure me to eat.
()	()	()	()	()	()	15. **Am preoccupied with a desire to be thinner.	()	()	()	()	()	()	34. Give too much time and thought to food.
()	()	()	()	()	()	16. Exercise strenuously to burn off calories.	()	()	()	()	()	()	35. *Suffer from constipation.
()	()	()	()	()	()	17. **Weigh myself several times a day.	()	()	()	()	()	()	36. Feel uncomfortable after eating sweets.
()	()	()	()	()	()	18. ++Like my clothes to fit tightly.	()	()	()	()	()	()	37. Engage in dieting behaviour.
()	()	()	()	()	()	19. Enjoy eating meat.	()	()	()	()	()	()	38. Like my stomach to be empty.
							()	()	()	()	()	()	39. Enjoy trying new foods.
							()	()	()	()	()	()	40. Have the impulse to vomit after meals.

APPENDIX E
HUMAN SUBJECTS COMMITTEE



THE UNIVERSITY OF ARIZONA

HEALTH SCIENCES CENTER
TUCSON, ARIZONA 85724

HUMAN SUBJECTS COMMITTEE
1609 N. WARREN (BUILDING 220), ROOM 112

TELEPHONE: (602) 626-6721 or 626-7573

21 November 1984

Ann Maier, R.N.
College of Nursing
Arizona Health Sciences Center

Dear Ms. Maier:

We are in receipt of your project, "Closeness in the Dyadic Relationships of the Anorectic Family" which was submitted to this Committee for review. The procedures to be followed in this study involve a questionnaire/interview format that poses no risk to the participating subjects. However, regulations issued by the U.S. Department of Health and Human Services (45 CFR part 46, Subpart D) require that projects of this type be reviewed and approved by this Committee when the study population includes minor subjects. Although full Committee review is not required, a brief summary of the project procedures is submitted to the Committee for their information and comment, if any, after administrative approval is granted. This project is approved effective 21 November 1984.

Approval is granted with the understanding that no changes will be made to the procedures followed (as outlined in your request for approval) without the knowledge and approval of the Human Subjects Committee and your Departmental or College Review Committee.

Please be advised that due to the nature of the study procedures, the written consent form requirement is waived. If you have any questions regarding the above, please contact this office.

Sincerely yours,

Milan Novak

Milan Novak, M.D., Ph.D.
Chairman
Human Subjects Committee

MN/jm

cc: Ada Sue Hinshaw, R.N., Ph.D.
College Review Committee



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF NURSING

MEMORANDUM

TO: Ann Maier
4731 N. Campbell Ave
Tucson, AZ 85718

FROM: Ada Sue Hinshaw, PhD, RN *ASN* Katherine Young, PhD, RN
Director of Research Chairman, Research Committee

DATE: October 25, 1984

RE: Human Subjects Review: Dyadic Relationships in the
Adolescent Anorectic Family

Your project has been reviewed and approved as exempt from University review by the College of Nursing Ethical Review Subcommittee of the Research Committee and the Director of Research. A consent form with subject signature is not required for projects exempt from full University review. Please use only a disclaimer format for subjects to read before giving their oral consent to the research. The Human Subjects Project Approval Form is filed in the office of the Director of Research if you need access to it.

We wish you a valuable and stimulating experience with your research.

ASH/fp

APPENDIX F
CONSENT FORM

CONSENT FORM

Adolescent Family Relationships

You are being asked to voluntarily participate in a research study. The purpose of this study is to learn more about how you see your relationship with certain members of your family. You will be asked to complete a questionnaire and describe your family by placing felt figures on a felt board. This will take about an hour of your time.

The investigator will answer any questions you may have about this study or your participation in this study.

There are no known risks to you or members of your family by participating in this study. You are free to withdraw at any time or to choose not to answer any question. Your health care or care of your family members will not be affected if you decide you do not wish to participate or you choose to withdraw during any phase of this study.

Your name will not appear on any questionnaire or research notes. Any information you give will be confidential. Any publication of information obtained from this study will be presented in such a way that your personal identity will not be revealed.

I have read the "Subject's Consent." The nature, risks, and benefits of this project have been explained to me. I understand that I may ask questions and that I am free to withdraw from this project at any time without affecting my own or my family members' medical care. I also understand that this consent form will be filed in the College of Nursing with access restricted to the principal investigator or authorized representatives of the College of Nursing. A copy of this consent form is available to me upon request.

(Subject)

(Date)

As a parent, I agree to participate in this study, and I give my permission for my daughter to participate.

(Parent)

(Date)

(Parent)

(Date)

(Principal Investigator)

(Date)

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