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I am submitting herewith a dissertation written by Andrew Michael Stewart entitled: "Perceived Family Functioning, Interpersonal Orientation, and Rorschach Measures of Aggression and Mutuality of Autonomy." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Michael R. Nash, Ph.D., Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Associate Vice Chancellor and
Dean of The Graduate School

PERCEIVED FAMILY FUNCTIONING, INTERPERSONAL ORIENTATION, AND RORSCHACH MEASURES OF AGGRESSION AND MUTUALITY OF AUTONOMY

A Dissertation

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Doctor of Philosophy

Degree

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Andrew Michael Stewart

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Dedication

This dissertation is to the memory of Susan Turcillo.

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Abstract

This study examined the relationship between retrospectively reported family-of-origin functioning, present interpersonal adjustment, and fantasied perceptions of aggression and mutuality. One hundred seven archival protocols were scored for family functioning quality on the Colorado Self-report Measure of Family Functioning (CSMFF) (Bloom, 1985; Bloom & Lipetz, 1987; Bloom & Naar, 1994), interpersonal affiliativeness and hostility on the a portion of the Leary (1956) System of Interpersonal Personality Diagnosis, primary and secondary process manifestations of aggression on the Rorschach using a portion of Holt's (1977) content-scoring system, and Mutuality of Autonomy (MOA) (Urist, 1977; Urist & Shill, 1982) of relationships between perceived human, animal and object content on the Rorschach. Subjects reporting healthy family functioning, as remembered at age 12, were found to be significantly more affiliative than were subjects reporting unhealthy family functioning (p = .001). Family functioning subscales found to predict interpersonal orientation were somewhat different than hypothesized for the CSMFF, with Authoritarian Family Style, Cohesion, Democratic Family Style, and Conflict contributing approximately 40% of the overall variablity in affiliativeness in the present study. Subjects reporting unhealthy family functioning were no more likely to perceive primary and secondary process manifestions of aggression on the Rorschach than were subjects reporting healthy family functioning, although there was a trend in the expected direction (p = .76). Subjects reporting healthy family functioning were no more likely to perceive relationships on the Rorschach as more empathic and egalitarian than were subjects reporting unhealthy family functioning. Overall, subjects tended to be somewhat more interpersonally hostile, and more likely to perceive relationships between figures on the Rorschach as portraying malevolence and imbalance in mutuality, than would be expected in the general population. Results are discussed in terms of specific

contributions of family functioning variables to the prediction of interpersonal adjustment, generalizability of results to other populations, and weaknesses in methodology. It is recommended that future research of this type employ a prospective longitudinal design rather than rely solely on self-report and archival data.

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CHAPTER 1

Introduction

The notion that early experience impacts upon later functioning is fundamental to developmental psychology and psychopathology, whether psychodynamic, behavioral, or biological. Early psychoanalytic theory emphasizes the influence of individual parental figures on the developing child (Freud, 1949/1969). Behavioral theory emphasizes reinforcement and conditioning in the learning and maintenance of behavior and emotion (Skinner, 1938; 1957; Watson & Rayner, 1920; Miller, 1941; Miller & Dollard, 1941). Biological theory emphasizes the influence of injury, disease, natural bodily mechanisms, and genetic predisposition on an organism's functioning (Beach, 1948; Tryon, 1942).

Although much of the early psychological literature alluded to the family's role in disordered behavior, for example, schizophrenia (Fromm-Reichman, 1948) and alcoholism (Lewis, 1937), empirical study of family interaction per se has only taken place since the 1950s (Handel, 1965; Jacob, 1987; Jacob & Tennenbaum, 1988; Walsh, 1982). Psychoanalytic theory, although historically emphasizing the influence of individual parental figures and intrapsychic factors, has contributed to the understanding of the influence of family relationships on emotional development (Anthony, 1983). Psychoanalytic attention to the whole family was evident in the 1930s. "The Family Neurosis and the Neurotic Family" was the topic of the International Congress of Psychoanalysis in 1936 (Grotjahn, 1959). This was followed shortly thereafter by Ackerman's (1938) first paper on family unity; Ackerman (1938; 1958) noted the difficulty in carrying out successful therapy without dealing with other family members so as to restore healthy relationships.

Nonetheless, the general contributions of major personality theorists such as Freud (1949/1969), Lewin (Lewin, Lippett, & White, 1939), and Erikson (1950) notwithstanding, it should be noted that sociology and anthropology provided the most significant contributions to the general field of family studies up to the 1950s (Handel, 1965; Jacob, 1987; Jacob & Tennenbaum, 1988).

Object relations theory (Blatt, 1974; Mahler, 1961; Winnicott, 1965; 1971), self psychology (Kohut 1971; 1977; 1984), and interpersonal psychiatry (Sullivan, 1953) have maintained that early interpersonal environment is a primary factor in the child's emotional and personality development. From a broadly defined object relations perspective, personality organization and manifest behavior are presumed to derive from internalized experiences of the relationship of the self to the parental figures, while the developmental maturity of adult personality organization depends upon the degree of differentiation and integration of these early relational experiences. (Kernberg, 1966; Guntrip, 1971; Kohut, 1971).

Sullivan (1953) defines personality as "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (pp. 110-111). In this light, Sullivan (1953) and Leary (1957) emphasize the development of personality in the context of the family environment, giving rise to enduring patterns of behavior and perception which cannot be examined separately from their interpersonal contexts. This view is echoed by Horney (1945), Fromm (1947), and Erikson (1950), placing both healthy and pathological development squarely in a cultural and familial context. Leary (1957) notes that while Sullivan, Fromm, and Horney do not deny the importance of instinctual factors, that is, sexual and aggressive, they nonetheless have abandoned the concept of

"libido" in favor of a social or interpersonal point of view. Erikson (1950) has attempted to integrate ego, cultural, and interpersonal conceptions within the basic framework of Freudian psychosexual (drive) theory, demonstrating that human experience is to be understood in terms of the relativity of these three factors.

Family Functioning, Sexual Abuse, and Psychopathology

Retrospectively reported, pathological modes of family interaction, whether "historically true" or perceived, have been associated with the occurrence of sexual abuse (see Sexton, 1992 for an extensive review of this literature) and with later pathological adjustment among sexually abused populations (Browne & Finkelhor, 1986; Hulsey, Sexton, & Nash, 1992). However, Harter, Alexander, and Neimeyer (1988), Hulsey (1990), and Hulsey et al. (1992) have demonstrated that when perceived family environment was statistically controlled, sexual abuse no longer predicted adult psychopathology.

That is, *the environment or context in which abuse occurs, not abuse or event per se*, appears to have the greatest impact on later adjustment. For example, Horner, Hulsey, Sexton, Cohen, and Nash (1989) found that age-of-onset (developmental context) of sexual abuse impacted differentially on later interpersonal adjustment. They reported that onset of abuse at age 11 or earlier was associated with more extreme interpersonal styles, either hostile-paranoid or naive-affiliative. Whereas, onset of abuse at age 12 or later was associated with ambivalence regarding the trustworthiness and approachability of others. In a follow-up study, Horner, Hulsey, Sexton, Cohen, Nash, and Stewart (1994) found that the relationship between age of onset and interpersonal adjustment held true regardless of the severity of abuse

experienced.

Indeed, whether expressed in terms of "cohesion" and "adaptability" (Minuchin, Rossman, & Baker, 1978; Olson, Portner, & Lavee, 1985), "family support" (Conte & Schuerman, 1987), or the quality of "maternal warmth" (Peters, 1988), it is arguable that the quality of family interaction, rather than the occurrence or presence of specific traumata or other conditions (i.e., parental drug abuse, divorce), appears to be the best predictor of later difficulties among children, adolescents, and adults (McCauley & Myers, 1992; Prange, Greenbaum, Silver, Friedman, Kutash, & Duchnowski, 1992). Thus, it appears that development within a particular interpersonal context interacts with, or mediates, the effect of event.

Characteristics of Healthy Family Functioning

Of central importance to the present study is the definition and measurement of "healthy family functioning". While specific aspects of family functioning are of interest, several researchers "have attempted to formulate a set of overall general principles [which] constitute the basis for omnibus [inventories] of family functioning" (Bloom, in press). Bloom and Naar (1994) note that Barnhill (1979) has identified four basic themes common to various researchers' conceptualizations of healthy family functioning: *identity processes, change, information processing,* and *role structuring*. As delineated by Barnhill (1979), "identity processes" include individuation and mutuality, "change" includes flexibility and stability, "information processing" includes clear perception and clear communication, and "role structuring" includes role reciprocity and clear generational boundaries.

A number of self-report inventories have been developed to measure

the quality of family functioning. The 75-item Colorado Self-Report Measure of Family Functioning (CSMFF) (Bloom, 1985; Bloom & Lipetz, 1987; Bloom & Naar, 1994), used in the present study, was derived factor analytically from four such commonly used measures: the 90-item Moos and Moos Family Environment Scale (FES) (Moos & Moos, 1976, 1981), the 80-item van der Veen Family-Concept Q Sort (FCQS) (van der Veen, 1965), the 111-item Family Adaptability and Cohesion Evaluation Scale (FACES) (Olson, Bell, & Portner, 1978), and the 50-item Santa-Barbara Family Assessment Measure (FAM) (Skinner, Steinhauer, & Santa-Barbara, 1983).

Expanding on the work of Moos and Moos (1976), the CSMFF (Bloom, 1985) is organized under three major dimensions of the family environment: (a) interpersonal relationships among family members (*Relationships*), (b) directions of personal growth emphasized in the family (*Values/Personal Growth*), and (c) the basic group organizational structure (*System Maintenance*). These dimensions, as originally delineated on the FES (Moos & Moos, 1976, 1981) were developed from a sample of 285 families recruited from church groups, a newspaper advertisement, and through high school students. Ethnic minority and disturbed or "clinic" samples were also recruited. However, Moos and Moos (1976) report that constraints on computer time and cost limited the representative sample size to 100 for analysis.

Loveland-Cherry, Youngblut and Leidy (1989) and Roosa and Beals (1990), among others, have questioned the reliability and validity of the original FES subscales. Specifically, these authors claim that reliability coeficients for the FES are below acceptable levels for practical or research use, and that the 10 subscales did not fall within Moos and Moos' (1976) three hypothesized dimensions. However, Moos (1990) claims that "an extensive body of research supports the

construct, concurrent, and predictive validity of the FES" (p. 199). Moos (1990) recommends the use of both conceptual and psychometric criteria "rather than solely rely on the pursuit of internal consistency, reliability, and factor analytic approaches to scale construction" (p. 199).

Bloom (1985) suggests that "any attempt to examine [family functioning] scales in relation to each other would do well to begin with the premise that although defects in scale development should not be perpetuated, individual scales should not be unnecessarily dismantled" (p. 226). In this light, Bloom (1985) used factor analysis to develop statistically robust scales for the CSMFF within Moos and Moos' (1976) conceptual framework. Bloom (1985) defines the *Relationship* dimension as the degree of pride that family members take in belonging to their family, the amount of openly expressed affection, and the regularity of conflictual interactions within the family. The *Values/Personal Growth* dimension is defined as an index of intrafamilial emphasis on specific developmental processes often fostered by family living. The *System Maintenance* dimension is defined as revealing the organizational properties of the family as well as the relative influence exerted by family members upon each other. Assessed under these three dimensions are:

Relationship

Family Sociability, Family Idealization, Expressiveness, Cohesion, Disengagement

Values/Personal Growth

Cultural Orientation, Active-Recreational Orientation, Religious Emphasis

System Maintenance

Democratic Family Style, Laissez-Faire Family Style, Authoritarian Family Style, Familial Locus of Control, Enmeshment, Organization, Conflict.

Of the 15 CSMFF subscales, 12 scales on the Relationship and System Maintenance dimensions of the CSMFF parallel Barnhill's (1979) integrative views of healthy family functioning (Bloom & Naar, 1994) and should distinguish well-functioning from poorly-functioning families (Bloom, in press). Thus, according to Bloom, healthy family functioning would appear to be indexed as follows:

	IDENTITY PROCESSES
Individuation	Enmeshment (low)
Mutuality	Cohesion, Family Idealization, and Family Sociability (high)
	CHANGE
Flexibility	Conflict (low)
Stability	Cohesion (high), Organization (low)
	INFORMATION PROCESSING
Clear Perception	External Locus of Control and Permissive Family Style (low)
Clear Communication	Democratic Family Style and Expressiveness (high)
	ROLE STRUCTURING
Role Reciprocity	Conflict and Disengagement (low)
Clear Boundaries	Authoritarian Family Style (moderately high), Permissive Family Style (moderately low)

But, the question of how to operationalize and measure family functioning in the present study remains. Bloom and Naar (1994) reportedly found that a number of CSMFF scales were significantly correlated with each other. Consequently, three conceptually significant second-order factors, accounting for 61.2% of the matrix variance, were identified through principle components factor analysis with varimax rotation of first-order factors computed from the 15 subscale scores. Bloom and Naar (1994) list the second-order factor loadings as follows:

Factor I Cohesion (.85), Expressiveness (.79), Conflict (-.65), Family Idealization (.80), Democratic Family Style (.79), Disengagement (-.68).

Factor II Family Sociability (.59), Intellectual-Cultural Orientation (.61), Active-Recreational Orientation (.62), External Locus of Control (-.64), Enmeshment (-.73).

Factor III Organization (.62), Permissive Family Style (-.77), Religious Orientation (.51), Authoritarian Family Style (.78).

The second-order factors appear to reflect three different over-arching dimensions of healthy family functioning. According to Bloom (in press) and Bloom and Naar (1994), high scores on the first factor reflect most theoretical views of normal intrafamilial functioning. Therefore, it would appear that in contrast to families reported by subjects as having been "unhealthy", "healthy" families may be described as:

1. **more cohesive**

   (How much are family members concerned about and committed to the family, spend time together, and are helpful and supportive of each other?),

2. **more expressive**

   (How much are family members allowed and encouraged to express their opinions and feelings to each other?),

3. **more idealized**

   (How much is the family prized and valued by its members?),

4. **more democratic**

   (How often are family decisions made with full participation of all family members?),

5. **less conflicted**

   (How often do family members get angry, criticize, and fight with each other?), and

6. **less disengaged**

   (How often are family members too independent of each other and fail to communicate with each other?).

Thus, healthy/unhealthy family functioning is reflected in the aggregate second-order Factor I (Family Functioning Quality) score, which is the sum of Cohesion, Expressiveness, Family Idealization, and Democratic Family Style minus Conflict and Disengagement.

The Rorschach: Problem Solving, Projection, and Interpersonal Representation

Beck (1952) states that "any action of any human can be understood as an activity of... a purpose-moved being... attempting to continue

itself in existence, to maintain equilibrium, and *to feel comfortable*" (p. 1, emphasis added). Sullivan (1953), Horney (1945), and Fromm (1947) view this dynamic movement toward survival, equilibrium, and comfort as an interpersonal phenomenon, rooted in the motivation to avoid anxiety. For Sullivan, this anxiety involves loss of self-esteem as reflected by others. For Horney, it involves feelings of helplessness and danger, and for Fromm, isolation and weakness vis-a-vis others.

In this light, Sullivan's (1953) definition of personality, "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (pp. 110-111), may be considered an "adaptive solution" (Beck, 1952, p. 20) to the problem of ambiguity, isolation, and potential discomfort or danger in relationships. Personality is thus a problem-solving task, much like the original conception of Rorschach's test. People attempt to integrate mental representations or fantasies of relationships, developed and elaborated in the context of the early family environment, with present-day interactions with "real" others. In this process, they are influenced by their needs, interests, and expectations in interpreting interpersonal situations.

For example, someone who has been sexually abused or otherwise traumatized might be likely to interpret a gesture of friendship as potentially leading up to recurrence of an abusive situation. They would therefore be likely to behave in such a way as to minimize their discomfort in such a situation. Thus, it would appear that so-called internalized object relationships or interpersonal situations, as manifest in relationship themes between figures perceived on the Rorschach, serve to guide overt behavior. Conversely, relationships perceived on the Rorschach are thought to reflect the whole of personality organization, including directly observable behavior.

The theory underlying present-day Rorschach interpretation is one that regards personality as a dynamic whole in which all components, for example, cognitions, affect, behavior, are interdependent (Alcock, 1963). Notably, the Rorschach "experiment" was originally conceived of as a problem-solving or adaptation task rather than being one which reliably provided significant personal (or interpersonal) information (Exner, 1993). Subjects were thought to formulate their responses after conscious awareness that the blot is similar, but not identical, to existing memories of perceptual experiences (Rorschach, 1921). Exner (1986; 1993) notes that Cattell (1951) described the task as requiring subjects to "misperceive" the blot, that is, perceive it as something other than ink-on-paper, and through this misperception project something of themselves into the response. That is, the subject is required to provide something that is not actually there.

Rorschach (1921) postulated that subjects' responses resulted from integration of memory traces with the perceptual sensations created by blots, and that people differed in their ability to do so. Because Rorschach believed that this was a consciously realized operation, he rejected the notion that subjects' responses were influenced by unconscious elements (Exner, 1993). Interestingly, it was nearly twenty years after the introduction of the Rorschach that the notions of "unconscious processes" or "projection" would be applied to it.

As originally postulated by Freud (1913), projection is a natural human process of ego defense in which internally experienced "dangers" are translated into external ones, thereby making them easier to deal with. Murray (1938), de-emphasized the defensive aspects of Freud's (1913) initial definition, instead describing projection as the tendency to be influenced by needs, interests, and overall psychological

organization when interpreting or translating ambiguous stimuli. That is, present perceptions are influenced by memory traces (Rorschach, 1921) or mental representations of prior relational experiences (Blatt, Tuber, & Auerbach, 1990).

According to Blatt et al. (1990), Kernberg (1976), and others working within the broadly defined object relations perspective, mental representations of interactions between self and others, unconscious or otherwise, are at the center of normal and abnormal psychological development. In recent years, there has been a growing recognition of the importance of diagnostic assessment of individuals' sense of self and their repertoire of perceptions and attitudes in relationships with others (Urist, 1977).

Clinical research has made frequent use of the Rorschach, as well as other projective measures such as the Thematic Apperception Test (TAT) (Morgan & Murray, 1935), to assess the thematic content of interpersonal interactions (Blatt et al., 1990; Blatt & Lerner, 1983, Mayman, 1967; Urist, 1977). If properly administered, scored, and interpreted, these techniques can provide considerable information about the psychological characteristics of the subject (Exner, 1993). These characteristics include, but are not limited to, interpersonal themes, psychological or cognitive structure, cognitive and emotional resources, mental representations of self and others, and "the adaptive solution by the person of his [or her] life's problems" (Beck, 1952, p. 20).

A basic assumption is that self and object representations on projective techniques can be employed for evaluating or predicting interpersonal or psychosocial functioning (Blatt et al., 1990). Central to this basic assumption is the "projective hypothesis" (Frank, 1939), the premise of which being that people reveal something of their own

personality organization when confronted with ambiguous stimuli, be it an inkblot, unlabeled drawing, or interpersonal situation. The Rorschach is particularly well-suited for the role of assessing the underlying or internal cognitive and affective processes which serve to mediate interpersonal functioning. The manner in which these stimuli are organized, in terms of content and structure, reflects an individual's relatively stable meaning system which serves to direct and organize interpersonal behavior. In theory therefore, someone whose personality organization (cognitive structure or meaning system) is characterized by the assumption of aggression (or affiliation) in relationship with others would be likely to reveal this assumption in a variety of relatively ambiguous situations, including but not limited to there responses to projective testing and their interpersonal behavior.

Summary and Hypotheses

Psychological impairment and health associated with earlier environmental experiences may manifest in overt behavior and in structural and content indices on projective and objective tests. Although an archival data sample of sexually abused and non-sexually abused women is used in the present study, abuse per se is not the central focus of the present study. Rather, the present study utilizes the Colorado Self-report Measure of Family Functioning, a portion of the Leary System of Interpersonal Personality Diagnosis, and Rorschach aggressive and empathic content scales to assess the association of retrospectively reported early family environment with later interpersonal functioning and perception.

This assessment is carried out within a primarily between- groups quasi-experimental design elaborated by multi-variable interactional

analyses. Hypotheses are examined both categorically and continuously. Specific predictions are as follows:

1) Subjects who perceive their family functioning as having been unhealthy are most likely to be interpersonally hostile; whereas, subjects who perceive their family functioning as having been healthy are most likely to be interpersonally affiliative.

2a) Interpersonally hostile subjects will manifest greater amounts of aggressive content on the Rorschach than will affiliative subjects. Furthermore, interpersonally hostile subjects will manifest greater amounts of Rorschach content depicting malevolent victimization and results of aggression than will affiliative subjects.

Whereas,

2b) the Rorschach responses of affiliative subjects will be more empathic and egalitarian, with less manifest aggression, than the responses of hostile subjects; affiliative subjects will manifest more empathic and affiliative human, animal, and object content than will hostile subjects.

CHAPTER 2

Method

Subjects

One hundred thirteen adult women were recruited for an investigation described as a "Sexual Abuse Research Project", the results of which are reported elsewhere (Hulsey, 1990; Hulsey et al., 1992; Nash, Hulsey, Sexton, Harralson, & Lambert, 1993; Sexton, 1992). They were self-referred or referred from a variety of sources in eastern Tennessee, including the University of Tennessee Psychological Clinic, the University of Tennessee undergraduate psychology subject pool, a community agency treating women victims of domestic violence of childhood sexual abuse, and the community at-large through a newspaper article describing the research and requesting volunteers. Subjects recruited through the university subject pool were eligible to receive extra class credit for their participation. No other form of compensation was offered to the subjects.

For the present study, six subjects were dropped because they failed to complete all the materials, leaving 107 protocols for analysis. Subjects included 58 abused women and 49 nonabused women; 47% of the abused group (n = 27) and 45% of the nonabused group (n = 22) were receiving outpatient psychological treatment. They did not differ on the demographic variables of income (median $4000 to $6000), hometown population (25,000 to 100,000) and level of education (less than two years post-high school). For the purposes of the original investigation, sexual abuse was defined as the occurrence of fondling, masturbation, or oral, anal, or genital intercourse, of or by the child, occurring before age 17 with someone at least five years older. This definition is

commonly accepted in sexual abuse research (Finkelhor, 1979), and allows for examination of women whose experiences could be readily defined as abusive (Hulsey et al., 1992).

Measures

Perceived family environment. The Colorado Self-Report Measure of Family Functioning (CSMFF) (Bloom, 1985; Bloom, in press; Bloom & Lipetz, 1987; Bloom & Naar, 1994) second-order Factor I score (referred to here and subsequently as "Family Functioning Quality") was selected as the independent variable to be tested in Hypothesis One. The CSMFF consists of 75 Likert-type items requiring subjects to retrospectively rate 15 aspects of their family environment. Subjects respond in a four-choice format (very true for my family; fairly true for my family; fairly untrue for my family; very untrue for my family) to such items as "Family members really helped and supported one another" [Cohesion], and "There was strict punishment for breaking rules in our family" [Authoritarian Family Style] (Bloom, 1985, pp. 233-234). It is organized into three conceptually and statistically distinct dimensions of family functioning as hypothesized by Moos and Moos (1976): *Relationships, Values/Personal Growth,* and *System Maintenance*. The CSMFF, often in conjunction with other instruments, has been used in a number of investigations (Ellwood & Stolberg, 1991; Hampson & Beavers, 1987; Mills & Hansen, 1991; Nash et al., 1993; Penick & Jepsen, 1992; Portes, Haas, & Brown, 1991; Shean & Lease, 1991; Stark, 1990; Stark, Humphrey, Crook, & Lewis, 1990). It has been demonstrated to be valid when used retrospectively, that is, when adult subjects are instructed to rate their family of origin at age 12 as per the standard procedure (Bloom, 1985).

High Family Functioning Quality scores on the CSMFF reflect most theoretical views of normal intrafamilial functioning, thus providing an overall assessment of the adequacy of family functioning (Bloom, in press; Bloom & Naar, 1994). Similar to the method employed by Sexton (1992), an aggregate Family Functioning Quality score may be derived by summing scores on Cohesion, Expressiveness, Family Idealization, and Democratic Family Style minus Conflict and Disengagement. Normative data is available which reflects Bloom's (1985, in press) hypotheses regarding characteristics of well- and poorly-functioning families. However, it should be noted that norms on the CSMFF are derived primarily from college-aged, non-clinical populations, which differs demographically from the present sample.

Interpersonal orientation. Interpersonal orientation, as assessed by a portion of the Leary System of Interpersonal Personality Diagnosis (1956, 1957), was chosen as a variable for this study. Norms are derived from samples of neurotic, psychotic, and psychosomatic patients, as well as from various non-clinical samples. Interpersonal diagnoses are derived from MMPI (Hathaway & McKinley, 1970) validity and clinical scale scores and plotted on a circumplex model defining eight personality styles along dimensions of dominance-submission and hostility-affiliation. The circumplex model is displayed in Appendix A. These eight personality styles are as follows:

Octant 1 Managerial-Autocratic

Octant 2 Competitive-Narcissistic

Octant 3 Aggressive-Sadistic

Octant 4 Rebellious-Distrustful

Octant 5 Self-effacing-Masochistic

Octant 6 Docile-Dependent

Octant 7 Cooperative-Overconventional

Octant 8 Responsible-Hypernormal

Alden, Wiggens, and Pincus (1990) note general agreement about the appropriateness of the two-dimensional circumplex model for examining interpersonal disposition, and it has been used in the development of other interpersonal and family functioning instruments (Benjamin, 1974; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988; Kiesler, 1983; Lorr & McNair, 1963; Olson, Portner, & Lavee, 1985). Andrews (1989) notes the utility of using Leary's taxonomy to compare and integrate various psychotherapeutic orientations and DSM-III (American Psychiatric Association, 1980) personality disorders. Horowitz and Vitkus (1986) and Wiggens and Pincus (1989) have demonstrated that such a taxonomy of interpersonal dispositions is indeed related to the DSM-III personality disorders. Heintzelman (1983) has demonstrated the validity of the Leary MMPI formulae in predicting overt behavior, while Cole's (1988) research has offered support to Leary's (1957) original observations regarding the relationship between family alcoholism and hostile interpersonal orientation.

Several strategies have been suggested for using the System of Interpersonal Personality Diagnosis (Leary, 1956). For example, if differences between hostile and affiliative groups are of interest (as in the present study), the circumplex may be divided in half, with hostile-affiliative dimension (LOV) standard scores less than 50 signifying hostility and scores greater than 50 signifying affiliation. Likewise, scores falling in octants 2, 3, 4, and 5 may be designated as "hostile" while those in octants 1, 6, 7, and 8 may be designated as "affiliative". Whereas, Horner et al. (1989, 1994) have designated octants 1 and 5 as "ambivalent", with 2, 3, and 4 being "hostile" and 6,

7, and 8 being "affiliative". The present study examines subjects' basic interpersonal orientation along the hostility-affiliation dimension.

Representations of aggression. Holt's (1977) Sadistic and Masochistic score was adopted from his system of assessing primary and secondary process drive and defense manifestations on the Rorschach (Lerner, 1975; Lerner & Lewandowski, 1975; Rickers-Ovsiankina, 1977). It delineates three content categories, *Sadistic Aggression, Victim of Aggression,* and *Results of Aggression*. Each category is rated as either Level 1, raw and primary process-dominated, or Level 2, signifying, symbolic or socially acceptable representations of aggression or the results of aggression. For the present study, three summary scores were calculated: Sadistic Aggression Levels 1 + 2, Total Victim and Results of Aggression Levels 1 + 2, and Total Aggression, all taken as percentages of the number of Rorschach responses. The Holt scoring criteria and sample responses are described in Appendix B.

Representations of autonomy. The Urist Mutuality of Autonomy Scale (MOA) (Urist, 1977; Urist & Shill, 1982) is theoretically rooted in self psychology, ego psychology, and object relations theory. The MOA Scale assesses the quality of interpersonal relationships by evaluating interactions portrayed on the Rorschach between people, animals, and/or things, focusing on the developmental movement toward separation-individuation. This scale rates self and object representations ranging from depictions of calamitous violence and destructiveness (Level 7) to mutually empathic relatedness (Level 1) represented in animate and inanimate movement responses. MOA scoring criteria and sample responses are described in Appendix C. Urist and Shill (1982) summarize the scale points as follows:

Level 1	Reciprocity-Mutuality
Level 2	Collaboration-Cooperation
Level 3	Simple Interaction
Level 4	Anaclitic-Dependent
Level 5	Reflection-Mirroring
Level 6	Magical Control-Coercion
Level 7	Envelopment-Incorporation

According to Blatt et al. (1990) these labels represent "a slightly different ordering and emphasis than the definitions given in the original [Urist, 1977] article, but the general intent remains the same" (p. 221).

The average MOA score is assumed to represent one's usual quality of interpersonal relatedness, while the highest and lowest scores are considered to represent the individual's range or repertoire of interactions (Blatt & Berman, 1984; Blatt et al., 1990). Blatt et al. (1990) found that malevolent and destructive interaction responses on the Rorschach were correlated with thought disorder and impaired reality testing, while failure to depict at least one mutually benevolent interaction response was correlated with impaired capacity for social adaption, although secondary to the severity of clinical symptoms.

Tuber (1992) notes that the MOA scale seemingly confuses aggression with autonomy in that the most pathological scores depict highly aggressive interactions. However, Tuber stresses that "it is not aggression per se but the imbalance of the 'battle' between the figures that is weighed most heavily in scoring a particular response on the MOA scale" (p. 183). Thus, a response on Card II such as "two people fighting with blood all around", while depicting an obviously aggressive interaction, would be scored as mutually autonomous because there is no

indication that one figure is overpowering the other.

For the present study, MOA scores were reverse coded so that "low" (< 4) scores represent degrees of destructiveness; whereas, "high" (> 4) scores represent degrees of autonomy and mutuality. This was done to facilitate interpretation of statistical results. Subjects' mean MOA score was calculated by dividing the sum of all scoreable responses by the total number of responses scoreable for MOA.

Procedure

Individual appointments were arranged for each subject, they were advised that they could discontinue participation at any time, and they were assured of the confidentiality of their responses. All materials were administered in the same order over two days. On the first day, subjects completed the demographic questionnaire, the CSMFF, with instructions to report their family of origin as remembered at age 12, and the MMPI. On the second day, the Rorschach was administered, as well as another measure reported elsewhere (Nash, Hulsey, Sexton, Harralson, Lambert, & Lynch, 1993).

The Rorschach was administered and scored, using Exner's (1986) system, by one of two advanced graduate students trained and supervised in the use of such scales. Protocols were later scored using the Holt (1977) and Urist (1977) content analysis systems. Experimenters were blind to abuse and treatment status during administration and scoring. Scoring reliability was assessed by selecting a random subset of 20 protocols which were then re-scored by two different advanced graduate students. This method of determining Rorschach scoring reliability has been well-documented (Blatt, Wein, Chevron, & Quinlan, 1979; Lerner, Sugarman, & Barbour, 1985).

Statistical Design and Hypothesis Testing

Hypothesis 1. (*Categorical Component*) One-way analysis of variance was conducted to determine whether subjects reporting relatively healthy family functioning differ significantly from subjects reporting unhealthy family functioning in their interpersonal orientation along the hostile-affiliative dimension. The independent variable (IV) was family functioning, as represented by the CSMFF second-order Factor 1 (Family Functioning Quality), with two levels: unhealthy and healthy. Family Functioning Quality scores may range from -20 to +70, with higher scores indicating healthier levels of family functioning. Scores were split according to the median (16.000) for the present sample to yield equal group *n*'s for analysis. The dependent variable (DV) was interpersonal orientation on the hostile-affiliative dimension of the Leary. Dimension standard scores may range from 20 to 80; lower scores reflect interpersonal hostility or oppositionality relative to higher scores, which reflect interpersonal affiliation.

(*Continuous Component*) A Pearson product-moment correlation was conducted to assess the association between subjects' CSMFF Family Functioning Quality scores and interpersonal orientation scores reflecting subjects' characteristic degree of affiliative behavior. Correlational analysis is considered to be quasi-experimental; both variables are treated as DVs (Tabachnick & Fidell, 1983). A positive correlation was thought to signify that adult subjects whose families functioned well (as retrospectively reported at age 12) would manifest greater degrees of affiliative behavior. Conversely, subjects having had poorly functioning families would be more interpersonally hostile as adults.

(*Exploratory Component*) Stepwise multiple regression was conducted

to determine the best linear combination of the 12 CSMFF subscale scores used in the present study that predict interpersonal orientation score. The number of IVs was limited to the 12 CSMFF subscales considered to distinguish healthy from unhealthy family functioning (Bloom & Naar, 1994).

Hypothesis 2a. (*Categorical Component*) One-way analysis of variance was used to determine whether relatively affiliative subjects differed significantly from hostile subjects in their levels of aggressive Rorschach content. The IV was interpersonal orientation, as represented by scores on the hostile-affiliative dimension, with two levels: hostile and affiliative. Scores were split according to the median (48.000) for the present sample to yield equal group *n*'s for analysis. The DV was total aggressive content, as represented by Holt's (1977) measure of primary and secondary process aggressive Rorschach content, taken as a percentage of the total number of responses (R). This method of employing Holt's system in determining differences between groups on primary and secondary process content is described by Lerner and Lewandowski (1975).

Anastasi (1985), Exner (1993), and Lerner and Lewandowski (1975) discuss the potentially problematic contribution of Rorschach productivity in interpreting results. Lerner and Lewandowski (1975) note that "with all Rorschach scoring systems, one must examine the relationship between the various scores and the total number of responses... and if using percentages of R doesn't work, then R should be statistically partialled out" (pp. 189-190). Therefore, one-way analysis of covariance was also conducted to determine the contribution of R to the variability of aggression scores.

(*Continuous Component*) The prediction that hostile subjects would

be more likely than affiliative subjects to manifest Rorschach content depicting malevolent victimization and results of aggression was examined through multiple regression. Interpersonal orientation was predicted across Sadistic Aggression and the summary Victim + Results of Aggression. The summary victim and results of aggression score was entered first into the regression equation based on the a priori prediction.

Hypothesis 2b. (*Categorical Component*) One-way analysis of variance was used to determine whether interpersonally affiliative subjects differed significantly from interpersonally hostile subjects in the degree to which they perceived Rorschach content depicting mutually autonomous relationships. The IV was interpersonal orientation with two levels: hostile and affiliative. Scores were split according to the median (48.000) for the present sample to yield equal group *n*'s for analysis. The DV was subjects' average mutuality of autonomy (MOA) score. One-way analysis of covariance was also conducted, with the total number of Rorschach responses serving as the covariate to control for productivity. However, the MOA data violated assumptions for the distribution; therefore, the results for this variable are considered invalid.

(*Continuous Component*) A Pearson product-moment correlation was used to examine the association between subjects' interpersonal orientation scores on the hostile-affiliative dimension of the Leary and their usual quality of interpersonal relatedness as represented by their average MOA scores. A positive correlation was considered to signify that subjects who manifested greater degrees of affiliative behavior would be more likely to experience their relationships as reciprocal and cooperative than would hostile subjects.

Statistical vs. Clinical Significance

Ankuta and Abeles (1993), Jacobson, Follette, and Revenstorf (1984), Jacobson and Truax (1991), and Kazdin (1980) caution that statistical significance, for example, an *F* value with $p < .05$, is not necessarily meaningful in the long run. That is, *internally valid* research may not necessarily be *externally valid*. Even if results for a particular sample can be unambiguously attributed to the independent variable, these findings may not apply to other populations or settings. Furthermore, as in psychotherapy and physical health outcome research, patients may "improve" as measured by some research instrument while continuing to experience considerable personal distress. For example, Shedler, Mayman, and Manis (1993) caution that single measures such as "neuroticism" (Eysenck, 1967) cannot be relied upon as indices of so-called mental health or illness. In this regard, Kissen and Eysenck (1962) and others have demonstrated that other factors such as suppression of emotion contribute to overall adjustment and health (Eysenck, 1994).

Ankuta and Abeles (1993) note that a unique concern of clinical research is in actually making a difference in patients' lives. For example, compared to functionally "normal" people, psychotic patients might not manifest statistically significant change on a symptom checklist between pre- and post-treatment conditions. That is, they may still "score" as psychotic after treatment. However, improvement could be viewed as a change from the need for institutionalization to being able to live independently or in a community residential facility. Thus, the selection of normative criteria is important in considering meaningful treatment outcome. Sargent and Cohen (1983) note that practitioners look to clinically significant (life-changing) findings

because they facilitate making essential treatment decisions. Ankuta and Abeles (1993) suggest that a more complete understanding of the data may be facilitated by examining clinical as well as statistical significance.

The present sample is largely drawn from clinical or "special" populations (approximately 79% in psychotherapy and/or identifying themselves as sexually abused). Normative data on the family functioning measure do not exist for a comparable sample. Hulsey et al.'s (1992) comparison of family functioning from the present sample with Bloom's (1985) normative data suggests that scores on family functioning and perhaps on interpersonal orientation may differ significantly but still not meet normative criteria for "healthy" vs. "unhealthy" or "hostile" vs. "affiliative".

It is important to note that design of the present study did not lend itself to fully examining the question of clinical (life changing) vs. statistical significance. There were neither within-subjects (pre-test/post-test) treatment measures nor indices of actual social functioning, for example, sociometric data, DSM-III (American Psychiatric Association, 1980) diagnoses, or self-report regarding subjects' satisfaction with their relationships. However, the present study was undertaken with the intention of examining the methodological issue regarding selection of comparable norms. To this end, supplementary analyses were conducted using the same statistical design as the primary analyses. Differences within the present sample on the family functioning and interpersonal orientation measures, with splits determined by local data, were then compared to the original normative data.

CHAPTER 3

Results

Subject Characteristics

As reported by Hulsey, Sexton, and Nash (1992) and Sexton (1992), subjects did not differ significantly on demographic variables of income, hometown population, or educational level. Nor were there significant differences in unemployment, racial, or recruitment characteristics between the clinical and non-clinical subjects.

All tables may be found in Appendix D. Significant differences were found between subject groups on the family functioning dimension and on interpersonal orientation. Table 1 presents the one-way ANOVA for subject groups, family functioning, and interpersonal orientation. Abused subjects reported poorer family functioning than did non-abused subjects, regardless of clinical status. Furthermore, subjects receiving psychotherapy at time of testing reported poorer family functioning than did subjects not in treatment, regardless of abuse status. Subjects who were neither abused nor in treatment were more interpersonally affiliative than were abused subjects, regardless of abused subjects' clinical status.

Significant differences were found between subjects' age, marital status, and family functioning. Table 2 presents the one-way ANOVA for subjects' marital status, age, and quality of family functioning. Separated/divorced subjects were older than single subjects at time of testing. Single subjects reported significantly better family functioning than did married or separated/divorced subjects.

Summary Of Results

All analyses were conducted using SPSS/PC+. Cases with missing data on variables used in each analysis were deleted pair-wise; *n* for each analysis is reported. Assumptions of linearity, homogeneity of variance, homogeneity of regression, and outliers were evaluated using SPSS/PC+ DESCRIPTIVES, FREQUENCIES, and EXAMINE. Presence of outliers and skewness led to application of appropriate square root or logarithmic transformations if the distributions were skewed greater than z ±2.58 ($p \leq .01$), as recommended by Tabachnick and Fidell (1983). Transformations are reported when applied.

> Hypothesis 1. *Subjects who perceive their family functioning as having been unhealthy are most likely to be interpersonally hostile; whereas, subjects who perceive their family functioning as having been healthy are most likely to be interpersonally affiliative.*

One-way ANOVA was conducted to test this hypothesis. Subjects's reported quality of family functioning, as indexed by CSMFF second-order Factor 1 (Family Functioning Quality), was the independent variable (IV), with two levels, "healthy" and "unhealthy". The dependent variable (DV) was subjects' affiliation dimension score.

Total N = 107 was reduced to 99 by excluding cases with missing IV or DV values; two cases with values falling on the median for Family Functioning Quality were also deleted. Results of evaluations for linearity, homogeneity of variance, and homogeneity of regression were satisfactory.

A significant difference on subjects' affiliation scores was found

between family functioning levels, $F(1, 97) = 17.880$, $p < .001$, η^2 (eta squared) = .156. η^2 represents the proportion of variability in the DV accounted for by the combined levels of the IV. Subjects reporting healthy family functioning were significantly more affiliative (mean = 51.592, std. dev. = 10.171) than subjects reporting unhealthy family functioning (mean = 42.660, std. dev. = 10.783). Family Functioning Quality was positively correlated with interpersonal affiliativeness (r = .438, n = 101, $p < .001$).

Stepwise multiple regression was conducted to determine the best linear combination of IVs, the 12 CSMFF subscale scores used in the present study, that predict interpersonal affiliativeness (DV) score. Results of evaluation of assumptions led to logarithmic transformation of one CSMFF subscale score, Family Idealization. Total N = 107 was reduced to 102 by excluding cases with missing IV or DV values.

Table 4 displays the inter-variable correlations. Table 5 displays the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (β), the squared semipartial correlations (sr^2) and R, R^2, adjusted R^2, and significance of F.

Four of the IVs were found to contribute significantly to prediction of interpersonal affiliativeness: Authoritarian Family Style (sr^2 = .324), Cohesion (sr^2 = .245), Democratic Family Style (sr^2 = .076), and Conflict (sr^2 = .040). Standard multiple regression was then conducted with simultaneous entry of the four IVs into the equation. R for regression was significantly different from zero: $F(4, 97) = 17.460$, $p < .001$. Altogether, 42% (39% adjusted) of the variability in affiliativeness could be predicted by knowing scores on these four IVs. Means and standard deviations are displayed in Table 6.

Hypothesis 2a. *Interpersonally hostile subjects will manifest greater amounts of aggressive content on the Rorschach than will affiliative subjects. Furthermore, interpersonally hostile subjects will manifest greater amounts of Rorschach content depicting malevolent victimization and results of aggression than will affiliative subjects.*

One-way ANOVA was conducted to test this hypothesis. Subjects' interpersonal orientation, as indexed by the Leary affiliation dimension, was the IV, with two levels, "affiliative" and "hostile". The DV was subjects' total Holt aggressive content, taken as a percentage of Rorschach productivity (R).

Results of evaluation of assumptions led to logarithmic transformation of the total aggressive content measure. Total N = 107 was reduced to 97 by excluding cases with missing IV or DV values and cases with extreme *z* scores; four cases with median values on interpersonal orientation were also excluded.

No significant difference was found on Rorschach aggressive content between levels of interpersonal orientation, although there was a trend in the expected direction ($p = .076$). That is, hostile subjects manifested somewhat greater levels of aggressive content than did affiliative subjects. Thirty-seven percent of hostile subjects' responses depicted aggression while 31% of affiliative responses depicted aggression.

One-way ANCOVA was also conducted, with the total number of Rorschach responses (R) serving as the covariate to control for productivity. Logarithmic transformation of R was made due to skewness of the distribution. After adjusting for productivity, no significant

difference was found for total aggressive content between levels of interpersonal orientation. Rorschach productivity provided significant adjustment to the DV, total Holt aggressive content taken as a percentage of R, with $F(1, 94) = 4.181$, $p < .05$.

Hierarchical and standard multiple regressions were conducted between subjects' affiliation score (DV) and sadistic aggression taken as a percentage of R, and composite victimization and results of aggression score (victim+results/2) taken as a percentage of R as the IVs. In the hierarchical multiple regression, total number of Rorschach responses was entered into the equation first to control for productivity. In the standard multiple regression, R was not entered.

Results of evaluation of assumptions led to logarithmic transformation of sadistic aggression scores and square root transformation of victim/results of aggression scores to reduce skewness in their distributions and improve the normality, linearity, and homoscedasticity of residuals. As noted previously, the number of Rorschach responses was logarithmically transformed. The affiliation measure was adequately distributed and was not transformed.

Results of the multiple regressions were not significant; therefore, they are not presented in tables. None of the IVs or the covariate (Rorschach R) contributed significantly to prediction of subjects' affiliativeness. Altogether, only 3% (1% adjusted) of the variability in affiliativeness (DV) could be predicted by knowing scores on sadistic aggression and victim/results of aggression. Mean total Holt aggressive content, sadistic aggression, victim/results of aggression, and R for affiliative and hostile subjects are reported in Table 3.

Hypothesis 2b. *The Rorschach responses of affiliative subjects*

will be more empathic and egalitarian, with less manifest aggression, than the responses of hostile subjects; affiliative subjects will manifest more empathic and affiliative human, animal, and objects content than will hostile subjects.

Results of evaluation of assumptions were unsatisfactory. The distribution of MOA scores was extremely skewed, and the assumption of between-group homogeneity of variance was violated. Data transformation was not helpful in "coaxing" the distribution toward normality. Therefore, results of the analysis for this variable in the present study cannot be considered valid and are not presented.

CHAPTER 4

Discussion

The results of the present study support previous research concerning the impact of early family functioning, as retrospectively perceived, on current adjustment. However, hypotheses regarding observable interpersonal behaviors or attitudes and so-called internalized or unconscious perceptions and fantasies about the quality of relationships were not supported. Results are discussed in terms of specific hypotheses.

Hypothesis 1: Family Functioning and Interpersonal Orientation

Retrospectively perceived family functioning predicted subjects' level of interpersonal affiliativeness in the present study. That is, subjects who retrospectively perceived their families as having been "healthy" were more affiliative than were subjects who perceived their families as having been "unhealthy". As indexed by the CSMFF Family Functioning Quality score, affiliative subjects' families were characterized as more cohesive, expressive, idealized and democratic, and less conflictual and disengaged than families of hostile subjects. However, the actual scales which, when taken in combination, predicted interpersonal orientation were somewhat different than hypothesized by Bloom (in press) and Bloom and Naar (1994). This finding will be discussed in detail below.

Hulsey et al. (1993) and Sexton (1992), using the present subject population, focused on the impact of family environment on individual (*intra*personal) psychopathology, whereas the present work did not address pathology per se. Rather, the present study focused on the

impact of one's early family environment upon present *inter*personal adjustment, in terms of so-called normal behavior and expectations in social situations.

Handel (1965) notes that the family, not the individual, is considered "the primary locus of mental health or illness" (p. 22). Barnhill (1979) reiterates this point in suggesting that the family is "a basic, if not *the* basic unit of psychopathology" (p. 94, emphasis in original). The development of reliable observational techniques (e.g., Bales, 1950; Singer & Wynne, 1966) and self-report measures has broadened the field's theoretical and methodological base such that individual adjustment or psychopathology may now be reliably linked to differences in family style and functioning (Beavers, 1976; Olson, Russell, & Sprenkle, 1979).

Family functioning has been demonstrated to interact with other conditions, for example, severity of sexual abuse (Hulsey et al., 1992; Sexton, 1992), to predict various types of psychopathology. Differences in family functioning and style also have been shown to impact on other areas of adjustment. For example, among populations of medical patients, quality of family support has been demonstrated to predict the degree to which health facilitating behavior occurs. Patients whose family environments are characterized by conflict and lack of support are likely to ignore medical advice, even if doing so would be life threatening (Doherty, Schrott, Metcalf, & Iasiello-Vailas, 1983; Stewart, Kelly, Robinson, & Callender, in press).

Apparently then, certain types of interaction in the family milieu, *or at least memories of such interactions*, are associated with present interpersonal behaviors, expectations, and outcomes (i.e., affiliativeness, hostility, health-facilitating vs. potentially self-

destructive behaviors). Qualitatively "positive" or "healthy" childhood family interactions appear related to greater degrees of affiliativeness and trust in adults; whereas, "negative" or "unhealthy" interactions appear related to relatively greater degrees of hostility and distrust.

As hypothesized by Bloom et al., the most salient types of interactions associated with healthy family functioning are cohesion, expressiveness, idealization, democracy in decision making, conflict, and disengagement. These characteristics comprise the Family Functioning Quality score, and are aspects of the four basic themes identified by Barnhill (1979) as common to various researchers' conceptualizations of family functioning, namely, *identity processes, change, information processing,* and *role structuring.*

As noted previously, according to Bloom (in press) and Bloom and Naar (1994), a high Family Functioning Quality score reflects most theoretical views of healthy intrafamilial functioning. As such, results of the present study suggest that this score is useful in research examining dimensions of family functioning as they relate to current adjustment. However, examination of the results revealed that the characteristics of family functioning which contributed to the overall prediction of interpersonal affiliativeness in the present study were somewhat different than those hypothesized by Bloom et al.

Specific predictors of interpersonal functioning. In the present study, approximately 16% of the variability in affiliativeness could be accounted for or explained by knowing subjects' Family Functioning Quality scores. However, approximately 40% of the overall variability in affiliativeness could be accounted for or explained by knowing subjects' scores on the *best linear combination of only four family characteristics*: Authoritarian Family Style, Cohesion, Democratic Family

Style, and Conflict. Of the 12 CSMFF scales utilized in the present study, Authoritarian Family Style made the greatest contribution to overall variability (approximately 32%). Notably, three of the six scales comprising the Family Functioning Quality score, Expressiveness, Idealization, and Disengagement, did not contribute significantly to prediction of interpersonal orientation.

As noted previously, *Expressiveness* describes how much family members are allowed and encouraged to express their opinions and feelings to each other. *Family Idealization* describes how much the family is prized and valued by its members. *Disengagement* describes how often family members are too independent of each other and fail to communicate with each other. These three scales, along with Cohesion, Conflict, and Family Sociability, comprise the Relationship dimension of family functioning (Bloom & Naar, 1994). The Relationship dimension is defined as the degree of pride that family members take in belonging to their family, the amount of openly expressed affection, and the regularity of conflictual interactions within the family (Bloom, 1985; Moos & Moos, 1976). Whereas, *Authoritarian Family Style* is the degree to which parents make the rules regarding family behavior, order others around, and punish children for breaking rules. It is one of the scales comprising the System Maintenance dimension of family functioning, which is defined as revealing the organizational properties of the family as well as the relative influence exerted by family members upon each other (Bloom, 1985; Moos & Moos, 1976).

Authoritative Family Style made the most significant contribution to overall prediction of interpersonal affiliativeness in the present study. One possible explanation relates to the hypothesized importance of clear generational boundaries in facilitating and maintaining family

mutuality and stability and promoting adequate identity development (Barnhill, 1979). Role complementarity and clear generational boundaries promote stability in that values and rules set by parent-figures discourage disorganization and promote consistent behavior (Minuchin, 1974; Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967). Lack of clear roles, boundaries, and stability result in persistent conflict and the development of identity diffusion among individual family members (Lederer & Jackson, 1968; Minuchin et al., 1967).

Authoritarian Family Style does not necessarily imply rigidity. Rather, as a component of the "family health cycle" (Barnhill, 1979), it denotes that the executive control function of the family lies primarily with the parent-figures, without them behaving as rivals with their children for attention, or rejecting the parental role completely (Lidz, Fleck, & Cornellson, 1965). Lidz et al. (1965) and others have described the abdication of the executive role by parents of schizophrenics, clearly an example of disturbed identity development within the family context. Another example is provided by Sherwood and Cohen (1994). Those authors posit that part of the etiology of failure of individuation and "as-if" (Deutch, 1942) personality development is the parents' demand that the child serves as caretaker or protector of the parents' narcissistic needs. Favoring of parents' needs over the potentially conflicting needs of the child, termed *pathogenesis*, has been associated with the development of schizophrenia. Meyer and Karon (1967) found that TAT responses of mothers of schizophrenics averaged 65% pathogenic, while fathers' responses were nearly as high.

In the present study, less conflictual interpersonal functioning was associated with the subjects' perceptions that their parents facilitated family stability and healthy individual identity development

by setting and enforcing values and rules that discouraged disorganization and promoted consistent behavior. Thus, the finding that Authoritarian Family Style contributed so highly to prediction of interpersonal functioning highlights the importance of adequate intergenerational boundaries and appropriate roles for both healthy family functioning and individual identity development.

Another possible explanation for the salience of Authoritarian Family Style may relate to characteristics of the present sample. As noted previously, punishment by parent-figures, although not specifically stated as "physical punishment", is a component of Authoritarian Family Style. Sexton (1992) "unexpectedly" found that greater physical punishment predicted greater developmental maturity of psychological structures and adequate reality testing; whereas, severe sexual abuse predicted relative immaturity and poor reality testing as measured by Blatt and Berman's (1984) Concept of the Object measure. In a conceptually similar study, Westen et al. (1990), found that greater maternal physical abuse was positively and significantly related to higher levels of object relatedness on the TAT.

It is possible that the child's experience of physical punishment by parent-figures promoted adaptation and "survival" in the face of sexual abuse. Sexton (1992) reported that, for all subjects, only physical punishment predicted psychological maturity, while no other variable, including sexual abuse, did so. However, for sexually abused subjects, severity of abuse predicted relative immaturity of psychological structures and poorer reality testing while physical punishment had no significant predictive value. Given these findings, Sexton (1992) suggested that physical punishment and sexual abuse contributed differentially to developmental maturity. Physical

punishment may promote development of more mature and differentiated psychological structures "if a clear, logical, and rational relationship between behavior and consequence were present and appreciated by the child.... [Furthermore, the child may learn] "to perceive in an accurate manner complex social and interpersonal cues to avoid punishment" (Sexton, 1992, pp. 33-34). As Alcock (1963) and Beck (1952) note, all components of personality are interdependent and serve to maintain survival, equilibrium, and comfort. Thus, a greater ability to make accurate, complex, and differentiated determinations regarding interpersonal relationships is considered to be adaptive and self-protective.

It is unclear whether punishment per se, as a component of subjects' perceptions of intergenerational boundaries and roles, influenced their present interpersonal functioning. However, given the apparently differential contribution of physical punishment and sexual abuse to psychological development (Sexton, 1992) in the present sample, it is likely that sexual abuse was associated with physical punishment in some way to predict interpersonal functioning. Examination of the present data revealed that sexually abused subjects were more interpersonally hostile, regardless of clinical status. However, subjects reporting greater levels of Authoritative Family Style were more affiliative, regardless of abuse status. Therefore, perceptions of intergenerational boundaries and roles in childhood, of which parental punishment is defined as being a component, appear to have made a greater contribution than did sexual abuse to interpersonal personality development in the present study. Maintenance of clear boundaries, regardless of whether sexual abuse occurred, was associated with less conflictual interpersonal functioning. Thus, development within a family

characterized by clear boundaries appears to have facilitated or promoted stable (i.e., less conflicted) identity development in the face of potentially traumatic experience. This finding is echoed by Harter et al. (1988), Hulsey (1990), Hulsey et al. (1992), and Sexton (1992), who found that the occurrence of childhood sexual abuse did not predicted adult psychopathology when perceived family environment was taken into account.

Expressiveness, Idealization, and Disengagement did not appear in the final predictive "solution" for interpersonal functioning. One explanation may be that, given the high inter-scale correlations reported by Bloom (1985), a number of CSMFF scales may measure conceptually similar attributes so as to be redundant in any assessment of family functioning (Bloom & Naar, 1994). For example, items on the Cohesion scale loaded heavily on Family Idealization (r = .82) while items on Expressiveness loaded heavily on Democratic Family Style (r = .79) in factor analysis of the final CSMFF (Bloom & Naar, 1994). Examination of the present data revealed similar inter-scale correlations (r = .79 and .75 respectively). Thus, a family characterized by concern, commitment, and support (Cohesion) may be more likely to be prized and valued by its members (Idealization). Likewise, expression of feelings and opinions (Expressiveness) may be more acceptable in a family in which all members communicate about and participate in decision making (Democratic Family Style).

Factor analysis of the final CSMFF revealed that Disengagement had a highly negative loading on both the first (Family Functioning Quality) and third (System Maintenance) second-order factors and could not be reproduced as a factor in its own right (Bloom & Naar, 1994). Bloom and Naar (1994) do not offer an hypothesis for this finding in terms of the

contribution of "too much independence and failure to communicate" to family health and organization. However, it appears that so-called optimal levels of independence and communication may serve to facilitate relationships and role structuring among family members. Indeed, Olson, Russell, and Sprenkle (1989) note that positive communication skills (i.e., empathy, reflective listening, supportive comments) permit sharing of changing needs and preferences as they relate to cohesion (togetherness or emotional bonding) and adaptability (ability to change power structure, role relationships and rules). Furthermore, clear communication facilitates complementarity or role reciprocity between members, thereby facilitating clear generational boundaries, stability, and a sense of mutuality in family relations (Lederer & Jackson, 1968). Whereas, negative communication skills (i.e., double messages, double binds, criticism) minimize the sharing of opinions and feelings, therefore limiting the family's ability to emotionally bond and adapt to situational and developmental stress.

Disordered communication has been shown to predict the onset of severe psychopathology (Doane, West, Rodnick, Goldstein, & Jones, 1981; Singer & Wynne, 1965; Tienari, 1992; Tienari, Sorri, Lahti, Naarala, Wahlberg, Pohjola, & Moring, 1985). Tienari et al. (1985), using a multitrait-multimethod design, have been following at-risk adopted offspring from a nationwide sample of Finnish women hospitalized for schizophrenia since 1960. Thusfar, at-risk adopted offspring raised in adoptive families characterized by high levels of disordered communication have been twice as likely to be diagnosed as psychotic, borderline, or character disordered. Whereas, those raised in adoptive families characterized by little or no disordered communication have not manifested psychotic or borderline conditions at all (Tienari, 1992).

However, Karon and Widener (1994) and Karon and Rosberg (1958) caution that no simple "single variable" causal explanation suffices. As Olson et al. (1989) note, communication facilitates (or hinders) the family's ability to bond and adapt to situational and developmental stress. From a family systems perspective, communication, emotional bonding, and role structuring are mutually causal. Different family therapy theories and techniques are seen as entering or impacting the system at different points in the family health cycle (Barnhill, 1979). In the present study, variables considered to represent most theorists' conceptions of healthy family functioning, namely, clear intergenerational boundaries (Authoritarian Family Style), clear communication (Democratic Family Style), stability and mutuality (Cohesion), and flexibility (relatively low levels of Conflict), were found to predict present affiliative interpersonal orientation. The contribution of intergenerational boundaries was found to be most significant. Whereas communication, stability, and mutuality, either directly represented in CSMFF scales or associated with Relationship and System Maintenance factors, were found cumulatively to make a comparable contribution.

Reducing uncertainty in prediction. Approximately 16% of the total variance was accounted for by the quality of family functioning. This effect, stated in terms of the strength of association between the IV and DV, η^2 (eta squared), is considered relatively large in the behavioral and social sciences (Cohen, 1969; 1977; Keppel, 1982). Cohen (1969) states that η^2 indicates "the proportionate amount *by which errors* are reduced by using [group] means, rather than [the mean for the total sample population], as a basis for 'prediction'" (p. 275, emphasis in original). η^2 may be usefully stated as R^2, the proportion of the

total variance of the DV associated with or accounted for by membership in one of two populations (Cohen, 1969) or the proportion of variation "explained" by the treatment manipulation (Keppel, 1982).

Reduction of uncertainty in prediction of current interpersonal functioning by knowing subjects' perception of past family environment may be illustrated in an intuitively compelling and meaningful way by examining the proportion of variance accounted for by group membership taken as a percentage of nonoverlap between "high quality" and "low quality" group means. This procedure is discussed in Cohen (1969). The proportion of variance may be expressed as a distance (*d*) between group means, or proportion of the standard deviation for the population. Equivalents of *d*, expressed as percentages of nonoverlap, may be found in Cohen (1969; Table 2.2.1).

For example, if there had been no difference between means for the "high quality" and "low quality" groups, 100% of their respective distributions would have overlapped (0% nonoverlap). In such a case, the highest 50% of one group would have exceeded the lowest 50% of the other group, with 50% of the upper half of one group exceeding the other group. If group means had differed by one standard deviation, more than half (55.4%) of their areas would not overlap. The highest 65.5% of one group would have exceeded the lowest 65.5% of the other group, with the mean or upper half of one group exceeding the lower 78.8% of the other group.

In the present study, mean Family Functioning Quality scores differed by nearly one standard deviation for the entire sample. Therefore, about 52% of the respective distributions did not overlap. Stated another way, the mean Family Functioning Quality score for "healthy" subjects exceeded 82% of all scores for "unhealthy" subjects.

Practically speaking then, 82% of subjects who retrospectively perceived their families as having been healthy were significantly more interpersonally affiliative than were subjects who perceived their families as having been unhealthy. Such a difference is clearly grossly perceptible, as it is greater than, for example, the estimated mean IQ difference between Ph.D. holders and typical college freshmen or graduates and persons with only a 50-50 chance of completing high school, as well as the mean difference in height between 13- and 18-year-old girls (Chronbach, 1960).

Uncertainty in predicting current interpersonal functioning may be further reduced by knowing scores on the best linear combination of only four family characteristics: Authoritarian Family Style, Cohesion, Democratic Family Style, and Conflict. These four characteristics accounted for approximately 40% of the variability in affiliativeness. That is, about 95% of subjects reporting moderate to high levels of Authoritarian Family Style, Cohesion, and Democratic Family Style, and low levels of Conflict, were more interpersonally affiliative than were subjects reporting lower levels of the first three variables and higher levels of the fourth.

Statistical vs. clinical significance. Ankuta and Abeles (1993), Jacobson et al. (1984) and Jacobson and Truax (1991) note the importance of discussing experimental findings in the context of overall clinical significance. Internal and external validity are not necessarily equated; experimental findings regarding special populations may not be generalizable to other populations and settings (Kazdin, 1980). As noted previously, the present research design did not lend itself to fully examining the question of clinical vs. statistical significance. That is, there were no pre-test/post-test measures of actual functioning.

However, the present study examined the methodological issue regarding selection of comparable norms. Approximately seventy-five percent of the present sample was in psychotherapy and/or had been sexually abused. Compared to the normative population, the present sample tended to manifest somewhat poorer family functioning and more interpersonal hostility. However, these differences were not significant for either variable.

One's interpersonal orientation, whether affiliative, hostile, aggressive, or passive, is not necessarily pathological unless it is extreme and/or inappropriate for a given situation (Leary, 1956). That is, one may be aggressive (action-oriented) and hostile and yet be considered within the normal range. For example, it might be to a competitive athlete's advantage to be orientated as such. However, if the athlete's orientation is extreme, he or she might lack the flexibility or ability to behave non-competitively or interact in a mutually satisfactory way in other interpersonal situations, namely, in situations requiring tenderness and patience such as with one's family and friends. Therefore, it is important to consider the degree as well as the quality of subjects' interpersonal orientation.

Examination of the present data revealed that interpersonal scores were within the non-extreme range for the Leary (1956) instrument. That is, on the average, subjects were neither "too affiliative" nor "too hostile", regardless of the quality of their early family functioning. Therefore, especially in light of the strength of association between family functioning and interpersonal orientation, results of the present study may be considered generalizable, in regards to the impact of family functioning on interpersonal adjustment, to other populations and settings.

Hypothesis 2a: Interpersonal Orientation and Rorschach Aggression

Interpersonal orientation did not predict the quantity or quality of aggressive content on the Rorschach in the present study, although the trend was in the expected direction. That is, interpersonally hostile subjects were statistically no more likely to perceive aggressive human, animal, or object content than were affiliative subjects. Furthermore, hostile subjects were no more likely to perceive content depicting malevolent victimization and results of aggression than were affiliative subjects.

Sexton (1992) found that the family relationship dimension was not significant in the overall statistical model for predicting quantity or quality of aggressive Rorschach content. Other factors, namely the "number of times physical punishment resulted in bruises, cuts, broken bones, or hospitalization" (p. 12), interacted with the family relationship variable used in Sexton's study to predict results of aggression.

In this light, the present results are not surprising. In a sense, interpersonal affiliativeness might be considered an "intermediate step" in predicting aggressive Rorschach material from the quality of subjects' early family functioning. That is, family functioning might be used to directly predict aggressive content without stopping to look at how it first impacts on interpersonal functioning. However, exploratory analyses revealed that neither family functioning nor interpersonal orientation were significantly associated with aggressive content on the Rorschach.

On the other hand, subjects in the present sample tended not to be extremely affiliative or hostile. Therefore, it would be expected that since no particular interpersonal "pathology" or maladjustment was

present, significant levels of fantasied aggression would not manifest. Perhaps subjects who tend to be inflexible, that is, who have limited interpersonal repertoires, would have "inner lives" more characterized by extremes in affect. They might then be more likely to respond in kind on projective testing. Exploratory analyses, using only subjects with extreme interpersonal scores, revealed that extremely hostile subjects indeed manifested significantly more overall aggressive content, as well as content depicting victimization, than did extremely affiliative subjects.

Furthermore, instead of just counting aggression scores, weighting them according to their "shock value" has been demonstrated to discriminate more effectively between experimental groups (Holt, 1975; Silverman, 1963). Thus, interpersonally hostile subjects in the present study may have manifested greater levels of aggressive content had primary process-dominated responses, which depict more intensive and extensive aggression and destruction, been weighted more heavily than the more "sublimated" or socially acceptable secondary process-dominated responses.

Hypothesis 2b: Interpersonal Orientation and Mutuality of Autonomy

Because distribution parameters for subjects' Mutuality of Autonomy scores were unsatisfactory, the results of the analysis cannot be considered valid. The most salient finding was that subjects as a whole tended to perceive relationships between figures as "characterized by a theme of malevolent control.... [portraying] a severe imbalance in the mutuality of relations between the figures" (Urist, 1977, p. 5; e.g., see Appendix C). Thus, subjects' scores were significantly more pathological than what would be expected in the general population.

In the previous discussion of the other Rorschach content variable (Holt, 1977) used in this study, it was noted that interpersonal orientation by itself was not a significant predictor unless extreme cases were used. Similar exploratory analyses were conducted using extremely hostile and affiliative subjects to predict MOA; however, the results were not significant. Extreme degrees of hostility or affiliativeness were not associated with perceptions of relationship themes on the Rorschach. Therefore, it is likely that the present results were confounded by other factors inherent to the sample but not examined in this study. For example, severity of sexual abuse and physical punishment, in interaction with the family functioning variable, were found to be powerful predictors of psychopathology, quality of object relations, and developmental level (Hulsey et al., 1992; Sexton, 1992). On the other hand, differences between affiliative and hostile subjects on quality of object relations, as measured by the MOA scale, may have been suppressed or negated by the generally pathological quality of subjects' MOA responses overall.

The Leary System has been shown to reliably predict interpersonal behavior, including one's style of co-opting others into participating in one's "relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (Sullivan, 1953; pp. 110-111). The MOA Scale has been demonstrated to be a reliable predictor of pathology and self-object relations, and has shown promise as an indicator of relational capacities and themes (Blatt et al., 1990; Harder, Greenwald, Wechsler, & Ritzler, 1984; Tuber, 1992). Importantly, both instruments have been used successfully to assess and predict behavior in clinical and non-clinical situations. However, results of the present study suggest that there is little or no concordant validity

between these two methods of assessing interpersonal functioning.

Rorschach Findings: Are Behavior and Fantasy Equatable?

Several possible explanations are suggested for the lack of support for hypotheses regrading Rorschach representations of aggression and interpersonal functioning in the present study. Personality, defined here in an interpersonal context, is considered to manifest at all levels of functioning (Beck, 1952). That is, expectable overt behavior as well as interpersonal fantasies or expectations on the Rorschach represent "levels" of total personality functioning.

In that regard, it is important to note that the present sample as a whole did not manifest significant interpersonal behavioral pathology or inflexibility, as indexed by affiliativeness dimension the Leary System. Furthermore, examination of the data indicated that subjects were somewhat interpersonally dominant, although within the adaptive range of functioning. That is, they may be described as able to act confidently and independently, as well as be direct and honest in their interactions with others (Leary, 1957).

Therefore, it would be expected that representations at the level of fantasy on the Rorschach would likewise suggest that the present sample functioned reasonably well. That is, since their perceptions of relationships did not appear to be especially influenced by aggressive expectations, needs, or interests at the behavioral level, there would be no reason to infer that their fantasy lives would be characterized any differently.

However, as noted previously, the present sample as a whole appeared to perceive themes of malevolent control, as indexed by the MOA scale, in relationships between humans, animals, and objects on the

Rorschach. One possible explanation may relate to an artifact of the data coding process. Many of the protocols did not have any responses scoreable for Mutuality of Autonomy. Therefore, mean MOA for these protocols was zero, which undoubtedly lowered the overall sample mean.

On the one hand, it might have been preferable to treat zero scores as missing data and therefore delete those cases. On the other hand, Alcock (1963) notes that the "expression of relationships is suggested by the very nature of the folded ink blots which results in symmetrical presentation of the two halves with a point of union between them" (p. 4). *Failure to perceive intrablot relationships*, however simple, suggests a pathological disability in interpersonal relationships (Alcock, 1963; Erdberg, 1990). Although Urist (1977) and Urist and Shill (1982) note that subjects' highest and lowest MOA score represent their range of interpersonal functioning, and that failure to perceive at least one benevolent relationship is pathognomic, no provision is made in that system for considering the *lack of responses depicting some sort of relationship*.

Leary (1957) notes that interpersonal orientation at levels of overt behavior and fantasy do not necessarily correspond. Furthermore, discrepancies between these levels suggest the presence of unintegrated aspects of the personality. It is possible that the present sample, largely a clinical or "special" population, manifests interpersonal pathology at the level of fantasy. The Leary System provides a method for examining this through the assessment of relational themes on the TAT, although collection of TAT data was not possible for the present study.

Previous research (Meyer, 1988; Sexton, 1992; Zivney, Nash, & Hulsey, 1988) found that sexually abused subjects, comprising about half

of the present sample, were prone to affective lability and an object seeking personality style. Primitive forms of impairment characterized by disturbed cognition, a damaged sense of self, and a preoccupation with human contact and gratification (Zivney et al., 1988) may have manifested in findings suggesting unintegrated personality functioning in the present sample. Practically speaking, one's observable interpersonal behavior may be hostile or aggressive, while at the same time their fantasies about relationships may be characterized by themes of affiliation and dependency. Conversely, one may be overtly affiliative, while harboring fantasies of mistrust and punishment.

This apparent "splitting" of aggressive and affiliative drive manifestations is characteristic of borderline pathology (Kernberg, 1966; 1976; Kernberg, Selzer, Koenigsberg, Carr, & Appelbaum, 1989), which has been found to be associated with childhood sexual abuse (Gartner & Gartner, 1988; Herman & Schatzow, 1987). Borderline-like features, namely affective lability and "primitive" object representations (Sexton, 1992), as well as childhood experiences associated with borderline pathology, namely sexual abuse, are characteristics of the present sample. These conditions may have manifested in the discrepancy between behavioral and fantasy level representations of interpersonal functioning on the instruments used in the present study.

Limitations of the Study

There were several limitations to the predictive power of the present study. These limitations are subsumed under three general categories and are addressed below: (a) the issue of using an archival data set previously collected with particular hypotheses in mind, (b)

measurement strategy, and (c) directionality of causation. That is, in regards to the latter, does the quality of past family functioning, as retrospectively perceived, give rise to particular behaviors and expectations in the present, or does present functioning mediate one's memories of past family functioning?

Archival data. The present data were originally collected for a carefully designed study of the psychological sequelae of sexual abuse. As outlined previously, a great deal of information was obtained for each subject, including quantity and quality of sexual and physical abuse. Furthermore, previous studies employing this data examined psychological variables in the context of both abuse and treatment status.

However, the present study was later undertaken with the intention of examining variables other than sexual abuse and clinical status. Nonetheless, these potentially confounding variables were not addressed in the statistical design. It would have been preferable to address abuse and treatment status variables directly, for example, by comparing groups on these dimensions or else partialling them out statistically.

Use of archival data limits the number of variables that can be examined. While "new" variables can be generated from existing ones, the number of possible variables remains somewhat static. For example, poor family functioning by itself did not manifest in gross psychopathology in this or previous studies. It would therefore be unlikely that the interpersonal orientation variable, calculated from existing MMPI indices and strongly associated with the quality of family functioning, would be any more effective in that regard.

In light of Sexton's (1992) and Hulsey et al.'s (1993) findings regarding the interaction of family functioning with other variables, it

would have been important to look at the interaction of interpersonal functioning with other environmental factors such as history of sexual and/or physical abuse, present living conditions, psychiatric history, and so forth. Sexton (1992) noted the limitation of not examining other possibly important predictors such as maternal psychiatric illness, childhood experiences of neglect, maternal separation, maternal alcohol abuse, and adoption (Westen, Ludolph, Block, Wixom, & Wiss, 1990).

However, information regarding the majority of the aforementioned demographic and developmental variables was unavailable. Thus, the present study is handicapped by existing limitations of the research that preceded it, including but not limited to: method of sampling, reliance on self-report measures, and equivocal generalizability of results to other populations and settings.

Measurement strategy. The Leary System of Interpersonal Personality Diagnosis (1956) was developed and normed in the mid-1950's. While the Leary (1956; 1957) and others have demonstrated its clinical utility over time, there are number of newer and more generally accepted measures available (c.f., Benjamin, 1974; 1977; Keisler, 1983; Wiggins & Pincus, 1989).

Furthermore, the strategy for using the Leary in the present study limited the detail to which overt interpersonal adjustment and perception of projective stimuli could be explicated. General agreement about the appropriateness of the two-dimensional circumplex model for examining interpersonal disposition has been discussed previously. However, only one dimension, affiliation-hostility, was utilized in the present study.

Behavior along the dominance-submission (activity vs. passivity, action- vs. reflective-orientation) dimension tends to be complementary

(Leary, 1957; Luft, 1984). That is, dominant behavior in one person tends to "pull for" a submissive response from the other in interpersonal situations. Behavior along the affiliation-hostility (object-seeking vs. object-rejecting, trust vs. distrust) dimension tends to by symmetrical or supplementary (Leary, 1957; Luft, 1984). That is, affiliative behavior is most often met with an affiliative response from others; whereas, hostility in one person "breeds" hostility in the other. For example, someone who is hostile-dominant (e.g., Competitive-Narcissistic Octant 2) would be expected to behave, and be responded to, quite differently than someone who is hostile-submissive (e.g., Self-effacing-Masochistic or passive-aggressive Octant 5).

Just as behavior may be complementary or supplementary, so may apperception (Murray, 1933). For example, aggressive content such as a "snarling tiger" may be seen by someone who fears hostility from others, likely related to passivity vis-a-vis others, as well as by someone who is actually aggressive (Holt, 1975). Therefore in theory, characteristic levels of dominance and affiliation interact to mediate one's perception of the environment.

However, present findings regarding the relationship between overt and fantasied interpersonal behavior and perception are equivocal at best. On the one hand, subjects did not appear to be significantly maladjusted; therefore, they would not be expected to manifest malevolent relational themes on the Rorschach. On the other hand, trends in the data which were possibly obscured by inadequate coding methods, as well as pathological characteristics noted by previous researchers, suggest the presence of hostile and destructive interpersonal expectations at the level of fantasy. A more thorough understanding of subjects' functioning could have been gained through systematic

exploration of the influence of dominance-submission on perception of interpersonal themes on the Rorschach.

Memory: "True recall" or "rewritten" to meet current needs and interests? Breuer and Freud (1895/1955) originally postulated that difficulties in repression of memories of early adverse experience, especially sexual seduction of children by adults, led to anxiety and other hysterical symptoms. Although Freud later abandoned this position, namely that abuse had actually occurred, the notion that early interactions between child and caretaker impacted upon later functioning remained central to developmentally oriented psychology. Two broad classes of early experience thought to be pathogenic were proposed by later writers: physical or sexual abuse and problems in early attachment to caregivers. Ferenczi (1949) proposed that abuse profoundly effected the developing personality such that the "victim" would be prone to experiencing anxiety, depression, and dissociation in later life. Whereas, Bowlby (1978, 1981) believed that adult depression was primarily related to the failure to form a secure attachment to caregivers, the experience of repeatedly being given the message that one is incompetent or unlovable, or the actual loss of a parent.

Empirical evidence confirms the link between clinical depression, psychopathological risk factors such as excessive self-criticism, and reports of abuse, inadequate (or lack of) parenting, or parental pathology (Andrews & Brewin, 1990; McCauley & Myers, 1992). Furthermore, studies of non-clinical populations indicate a greater risk for depression for persons having experienced greater parental rejection, physical abuse, higher parental discord, or less parental care and affection during childhood (Andrews, Brown, & Creasey, 1990; Blatt et al., 1979).

Thus, as Brewin, Andrews, and Gotlib (1993) conclude in a review of the literature concerning the veracity of retrospective reporting of early experience, "there seems to be little question that psychopathology in adulthood is consistently associated with reports of problematic early experiences" (p. 83). However, there is some doubt as to the reliability of patients' accounts of their childhoods. In regards to depressed patients, Burbach and Borduin (1986) and Gerlsma, Emmelkamp, and Arrindell (1990) suggest that the validity of retrospective accounts of early experiences with parents may be severely distorted and therefore questionable at best. In fact, some psychological theories of anxiety and depression ignore the role of early experience altogether (e.g, Eysenck, 1967, 1987; Wolpe, 1958), while some influential treatments such as cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) do not explicitly incorporate information about early experience into the treatment.

However, given general "theoretical agreement about the role of early experience in the development of psychopathology, it is striking to encounter the widespread assertion that, in practice, patients cannot give reliable and valid accounts of such experiences. If this were true, it would have considerable implications for both research and clinical practice" (Brewin et al., 1993, p. 84).

In this light, the method in which early family experiences are typically ascertained, namely through retrospective report as in the present study, gives rise to questions of directionality of causation. Just as one's needs, interests, and situation influence perceptions of ambiguous stimuli in present-day projective testing and behavior in interpersonal situations, some research has demonstrated that one's perceptions (memories) are influenced by current mood states, cognitions

and environment. That is, one's memories of their early family environment may be shaped or influenced by present life circumstance, including but not limited to present interpersonal adjustment.

Recall of childhood events may be shaped by both internal and external factors such as social influences, childhood amnesia, normal limitations in memory, and fear of consequences of disclosure. Over a short period of time, memory for events may be altered by asking leading questions (Loftus, 1979; Loftus, Donder, Hoffman, & Schooler, 1989). Furthermore, memory may be "hypnotically refreshed" such that highly hypnotizable subjects are prone to mistake imaginal events for "real" historical events (Bowers & Hilgard, 1988; Orne, 1979).

However, Brewin et al. (1993) conclude that if subjects are questioned about specific facts or experiences which they were old enough and "well placed" to know about, their retrospective reports are reasonably accurate and therefore represent antecedent conditions associated with present psychopathology and adjustment. Brewin et al. (1993) note that clinical and community studies of normal limitations in memory, general memory deficits associated with psychopathology, and mood-congruent memory processes are equivocal in concluding that retrospective reports are of questionable validity. That is, although bias and distortion may be shown to occur, there is evidence for substantial accuracy in early memories, free from systematic distortion and essentially stable across variations in mood, whether by patients or non-patients.

Thus, it would appear that in the present study, it is unlikely that subjects' perceptions regarding their early family functioning were systematically influenced by present interpersonal functioning and expectations. Furthermore, it is unlikely that subjects' present

psychopathology or mood state, potential confounding variables not included in the present study, systematically influenced their perception of early family functioning.

It is impossible to unambiguously delineate cause and effect in non-experimental designs (Sexton, 1992) such as the present study. Nonetheless, the use of structured methods for eliciting information about the early family environment have been demonstrated to yield highly consistent results across and within studies of antecedents of present adjustment (Parker, 1979; Schaefer, 1965). Subjects in the present study were required to provide specific personal information in their responses on the structured family functioning measure (e.g., "Family members really helped and supported one another" [Cohesion]; "There was strict punishment for breaking rules in our family" [Authoritarian Family Style]; Bloom, 1985, pp. 233-234). Furthermore, they were instructed to provide this information about a developmental period (twelve years of age) in which the "cognitive apparatus" was sufficiently matured in terms of language ability and abstract concept formation to understand significant aspects of their environment (Piaget, 1954, 1963; Wadsworth, 1971).

Therefore, the picture of the early family environment which emerged from subjects' responses on the family functioning measure is likely to have been reasonably accurate, placing emotional reactions, both past and present, in the appropriate context (Liotti, 1988). That is, subjects were not likely, as suggested by Gerlsma et al. (1990) to have "rewritten" their family history to correspond with present emotional experiences, interpersonal expectations, or societal expectations. Nonetheless, continued disagreement in the field as to the validity of retrospective reports highlights the need for longitudinal,

direct observation-based research designs to address this issue unequivocally.

Implications for Future Research

The results of the present study are considered to be meaningful. Despite limitations inherent in using archival data, reliance on retrospective report, and flaws in statistical design, this study demonstrated a significant link between perceived family functioning and likely interpersonal behavior. Furthermore, comparison with normative data suggests that this finding is generalizable to other populations and settings. Critically however, future research of this type should be designed from the "bottom up". That is, instead of attempting to work around the strengths and limitations of existing data, it is imperative that methodology be generated from carefully considered hypotheses. Furthermore, it is important to remember that clinical measures, albeit theoretically sound and statistically reliable and valid, are heuristic; they do not provide a total picture of human functioning.

In regards to the present finding that Authoritarian Family Style contributed so highly to prediction of interpersonal functioning, it will be important to further examine the contribution of intergenerational boundaries to family functioning and individual identity development rather than rely solely on specific scores or indices. As Brewin et al. (1993) note, there is a paucity of longitudinal research in which children and their families have been followed into adulthood to identify early predictors of psychopathology or adjustment. It will be important for future research to employ observational as well as self-report data within a prospective

longitudinal design. This will facilitate a more complete understanding of the context in which inter- and intrapersonal adjustment and pathology develop and elaborate over the life span. Furthermore, prospective data collection will enable future research to address continued concerns regarding the validity of retrospective self-report, as well as answer questions of causality more definitively.

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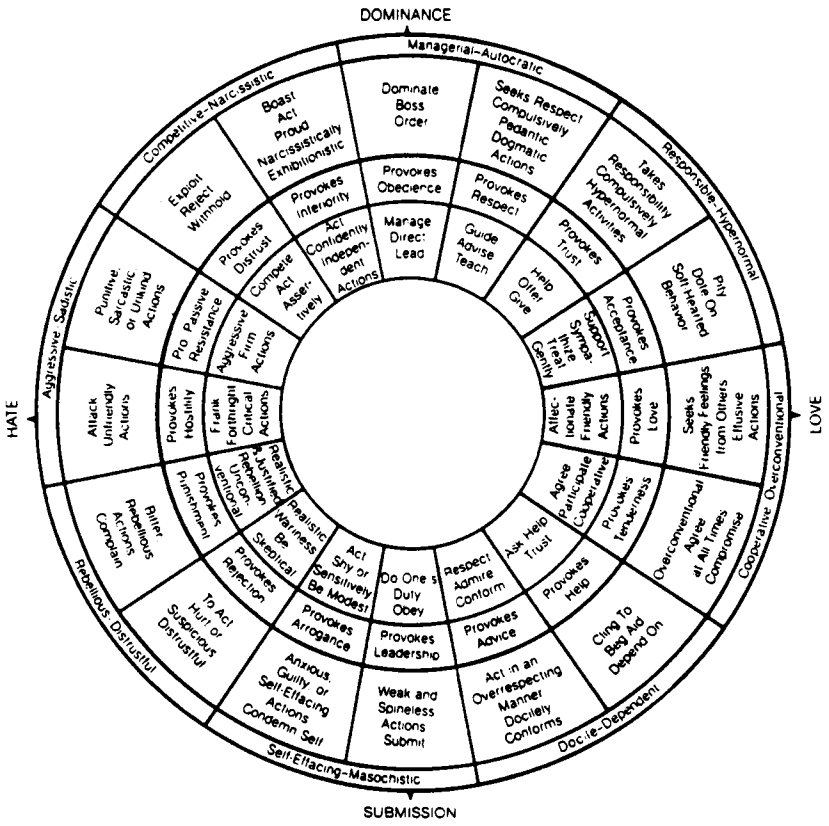
APPENDICES

APPENDIX A

APPENDIX A

Leary (1956) Interpersonal Personality Diagnosis Circumplex

D o m i n a n c e



H o s t i l i t y

A f f i l i a t i o n

S u b m i s s i o n

APPENDIX B

APPENDIX B

Holt (1977) Aggressive Content Scoring Criteria and Examples

Level 1 (Primary Process)

1. Sadistic Aggression: Vivid sadistic fantasies; primitive annihilation of persons or animals; murder, even if not sadistically elaborated; torture.

Example: (Card III) *"Two cannibals cutting someone up - they've already cut out the organs."*

2. Victim of Aggression: Castration or explicitly sexual masochism; extreme victimization; nightmarish helplessness; suicide.

Example: (Card IX) *"Bloody vagina - the woman's being raped - two attackers in the backround."*

3. Results of Aggression: Aftermath of sadistic, lethal action; decayed or putrefied flesh; mutilated persons or animals; mutilated object or plant when the response implies the effects of really ferocious action.

Example: (Card I) *"A dog's skull with little pieces of fur still on it."*

Level 2 (Secondary Process)

1. Sadistic Aggression: Explosions, manifestations of violent symbolic anal expulsion; fire; fighting; physical conflict; hostile acts that are not reciprocated or where the victim is not specified; threatening or potentially dangerous animals, people or parts thereof (e.g., "claws"); volcano; frightening creatures of childhood fairy tale

and fantasy; weapons; anger; the Devil.

Examples: (Card II) *"Two bears fighting, with their blood all around."*

(Card V) *"Alligator's head on the end of the wings."*

2. Victim of Aggression: People or animals in pain, suffering illness; frightened or threatened persons or animals; figures or objects in states of precarious balance; defensive objects or activities.

Examples: (Card X) *"A spider standing on one leg on a flower."*

(Card VIII) *"Two cats running up a tree to get away from something."*

3. Results of Aggression: Injured persons or animals; deformed persons or animals; persons or animals with missing parts; blood; deat, dead persons or animals with no ill will involved; decayed or rotting plants or objects; aftermath of fires, explosions; broken objects.

Example: (Card VI) *"A dead cat - it was run over on the highway."*

APPENDIX C

APPENDIX C

Urist (1977) Mutuality of Autonomy Scoring Criteria (pp. 4-5)[1]

1. Reciprocity-Mutuality[2]: Figures are engaged in some relationship or activity where they are together and involved with each other in such a way that conveys a reciprocal acknowledgement of their respective individuality. The image contains explicit or implicit reference to the fact that the figures are separate and autonomous and involved with each other in a way that recognizes or expresses a sense of mutuality in the relationship.

Examples: (Card II) *"Two bears toasting each other - clinking glasses."*

(Card II) *"Two people fighting - with blood all around."*

2. Collaboration-Cooperation: Figures are engaged together in some relationship or parallel activity. There is no stated emphasis or highlighting of mutuality, nor on the other hand is there any sense that this dimension is compromised in any way within the relationship.

Example: (Card III) *"Two women doing their laundry."*

3. Anaclitic-Dependent: Figures are seen as leaning on each other, or one figure is seen as leaning or hanging on another. The sense here is that the objects do not "stand on their own two feet," or that in some way they require some external source of support or direction.

Example: (Card IV) *"A drunk giant sitting on a stool - his feet are kind of spread out."*

4. Reflection-Mirroring: One figure is seen as a reflection or

imprint of another. The relationship between objects here conveys a sense that the definition or stability of the object exists only insofar as it is an extension of reflection of another. Shadows, footprints, etc. would be included here.

Example: (Card VII) *"A girl looking at her reflection in the mirror."*

5. Magical Control-Coercion: The nature of the relationship between figures is characterized by a theme of malevolent control of one figure by another. Themes of influencing, controlling, casting spells are present. One figure may literally or figuratively be in the clutches of another. Such themes portray a severe imbalance in the mutuality of relations between figures. On the one hand, figures may be seen as powerful and helpless, while at the same time others are omnipotent and controlling.

Examples: (Card 1) *"The two pigs on the side are grabbing the woman in the middle so she can't get away."*

(Card IX) *"A wizard casting spells on another wizard - with lightening coming out of his finger - the other one is losing."*

6. Malevolent-Destructive Control: Not only is there a severe imbalance in the mutuality of relations between figures, but here the imbalance is cast in decidedly destructive terms. Two figures simply fighting is not "destructive" in terms of the individuality of the figures, whereas a figure being tortured by another, or an object being strangled by another, are considered to reflect a serious attack on the autonomy of the object. Similarly, included here are relationships that are portrayed as parasitic, where a gain by one figure results by definition in the dimunition or destruction of another.

Examples: (Card V) *"An alligator head growing out of the bird's wing."*
(Card I) *"A wolf standing on a woman - her hands are up trying to protect her face."*

7. Envelopment-Incorporation: Relationships are characterized by an overpowering, enveloping force. Figures are seen as swallowed up, devoured, or generally overwhelmed by forces completely beyond their control.

Example: (Card X) *"Bugs inside a frog's stomach."*

Notes:

1) Scores were reverse coded so that greater degrees of mutuality of autonomy were represented by larger numbers.

2) Scale point labels are adapted from Urist and Shill (1982). Note that in the original (1982) article, labels do not necessarily correspond to activities represented (e.g., figures leaning on each other are labeled: "Simple Interaction"). The authors do not provide an explanation for this discrepancy, although Blatt et al. (1990) state that "this represents a slightly different ordering and emphasis than the definitions provided in the original [Urist, 1977] article, but the general intent remains the same" (p. 221).

APPENDIX D

APPENDIX D

Table 1

ANOVA of Family and Interpersonal Characteristics by Group

	Group (a)			
Variable	Ab/Tx	Ab/NTx	NAb/Tx	NAb/Ntx
Family Func (b)	6.600	12.250	20.955	38.885*
Orientation (c)	41.367	44.710	N.S.	53.741*

* = $p < .001$

Notes:

a) Group: Ab/Tx = Abused/In Treatment
Ab/Ntx = Abused/No Treatment
NAb/Tx = No Abuse/No Treatment
NAb/NTx = No Abuse/No Treatment

b) Family Func = Family Functioning Quality (CSMFF second-order Factor 1).

c) Orientation = Interpersonal Orientation (Leary affiliation dimension).

Table 2

ANOVA of Age and Family Characteristics by Marital Status

	Marital Status		
Variable	Single	Married	Separated/Divorced
Age at Test (a)	23.962	33.767	35.619*
Family Func. (b)	26.941	9.828	13.850*

* = $p < .001$

Notes:

a) Age at Test = Subjects' age at time of testing.

b) Family Func. = Family Functioning Quality (CSMFF second-order Factor 1).

Table 3

Mean Holt Aggressive Content[1] and Rorschach Productivity by Interpersonal Orientation

	Interpersonal Orientation[2]	
VARIABLE	Affiliative	Hostile
Total Holt Aggression	.3059(a)	.3671(b)
Sadistic Aggression	.1693(c)	.2088(d)
Victim/Results of Aggression	.0686(e)	.0791(f)
Rorschach Productivity	25.3830(g)	22.7500(h)

Notes:

1) All Holt aggressive content measures taken as a percentage of the number of Rorschach responses.

2) Affiliative = Leary affiliation score > 48 (median).
   Hostile = Leary affiliation score < 48 (median).

Standard deviations: (a) .1481 (b) .1866 (c) .0997
(d) .1294 (e) .0486 (f) .0523
(g) 9.9685 (h) 8.5166

Table 4

Correlations and Significance Levels (1-tailed) for Variables in Stepwise Multiple Regression of CSMFF Subscales on Interpersonal Orientation

VARIABLE	LEARYLOV	COHESION	EXPRESS	CONFLICT	ORGANIZE
LEARYLOV	------	.4949**	.4451**	-.4451**	N.S.
COHESION		------	.7604**	-.5435**	.2374*
EXPRESS			------	-.5712**	N.S.
CONFLICT				------	N.S
SOCIABLE	.2415*	.6332**	.6321**	-.4225**	N.S.
LOCUSCON	-.4152**	-.6319**	-.6807**	N.S	N.S.
IDEALIZE[1]	.3558**	.7864**	.7672**	-.6343**	N.S.
DISENGAG	N.S.	-.5422**	-.3704**	.3987**	-.3844**
DEMOCRAT	N.S.	.6851**	.7466**	-.5107**	N.S.
LAISSEZ	-.3022*	-.4487**	-.2794*	.4506**	-.5266**
AUTHORIT	-.4458**	.3742**	.5307**	.3739**	.4180**
ENMESH	-.4551**	-.4543**	-.4978**	.3309**	N.S.

	SOCIABLE	LOCUSCON	IDEALIZE[1]	DISENGAG	DEMOCRAT
SOCIABLE	------	-.5508**	.6673**	-.3626**	.6199**
LOCUSCON		------	-.5846**	.2984*	-.5523**
IDEALIZE[1]			------	-.4695**	.7455**
DISENGAG				------	-.4622**

Table 4 continued

VARIABLE	SOCIABLE	LOCUSCON	IDEALIZE[1]	DISENGAG	DEMOCRAT
LAISSEZ	-.4025**	.3587**	-.4495**	.5846**	-.2955*
AUTHORIT	-.3021*	.3955**	-.4651**	N.S.	-.4939**
ENMESH	-.3721**	.4412**	-.4609**	N.S.	-.4088**

N.S. = not significant

* = $p < .01$

** = $p < .001$

Note: 1) IDEALIZE = log transformed Family Idealization

Table 5

Unstandardized Regression Coefficient (*B*), Standardized Regression Coefficient (β), Squared Semipartial Correlation (sr^2), Multiple Correlation (*R*), Squared Multiple Correlation (R^2), Adjusted R^2, and Significance of *F* For Stepwise Multiple Regression of CSMFF Subscales on Interpersonal Orientation

VARIABLE	*B*	β	sr^2	*R*	R^2	Adjusted R^2
COHESION	1.303*	.495	.245	.495	.245	.237
AUTHORIT	-1.290*	-.303	.324	.569	.324	.310
DEMOCRAT	-1.213*	-.403	.076	.632	.400	.380
CONFLICT	-0.661*	-.247	.040	.663	.439	.415

* = $p < .001$

Table 6

Means and Standard Deviations For CSMFF Variables Contributing Significantly To Prediction of Interpersonal Orientation

VARIABLE	Mean	Standard Deviation
COHESION	13.163	4.357
AUTHORIT	14.296	3.368
DEMOCRAT	10.061	4.269
CONFLICT	12.908	4.286
LEARYLOV (DV)	46.846	11.434

Vita

Andrew Michael Stewart was born in Queens, New York on May 11, 1959. His family moved to Birmingham, Alabama in 1960 and then to Los Angeles in 1965. He graduated from Beverly Hills High School in 1977. After playing semiprofessional ice hockey in Texas, Seattle, and British Columbia, he received his Bachelor's degree in Psychology in 1985 and Master's degree in Community-Clinical Psychology in 1989 from California State University, Northridge. During his college and graduate career in California, he taught art, music, and sports to children, was a professional musician, and worked as an extern in a private non-profit community counseling center. He married Lisa Turcillo in 1988.

In 1989, he was accepted into the Ph.D. program in Clinical Psychology at the University of Tennessee, Knoxville. During his graduate career in Tennessee, he play professional ice hockey in the East Coast Hockey League and played music locally. He interned at Howard University Hospital in Washington, D.C. from 1993 to 1994, and began postdoctoral training in group psychotherapy and organizational consultation with the D.C. Mental Health Commission in 1994. He was accepted for a fellowship in adolescent and family psychiatry at Harbor-UCLA Medical Center in 1995. His clinical and research interests include cross-cultural issues, psychological aspects of organ transplantation, identity development within the family context, and professional training.