GREENE, FELICE BELSON

A COMPARISON OF SELF-DISCLOSURE PATTERNS OF THE SCHIZOPHRENIC AND NON-SCHIZOPHRENIC SIBLING WITHIN THE FAMILY SYSTEM

City University of New York PH.D. 1979

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs _____
2. Colored illustrations _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Print shows through as there is text on both sides of page _____
6. Indistinct, broken or small print on several pages ✓ throughout _____
7. Tightly bound copy with print lost in spine _____
8. Computer printout pages with indistinct print _____
9. Page(s) _____ lacking when material received, and not available from school or author _____
10. Page(s) _____ seem to be missing in numbering only as text follows _____
11. Poor carbon copy _____
12. Not original copy, several pages with blurred type _____
13. Appendix pages are poor copy _____
14. Original copy with light type _____
15. Curling and wrinkled pages _____
16. Other _____

University Microfilms International

300 N. ZEEB RD., ANN ARBOR, MI 48106 (313) 761-4700

A COMPARISON OF SELF-DISCLOSURE PATTERNS OF THE SCHIZOPHRENIC AND NON-SCHIZOPHRENIC SIBLING WITHIN THE FAMILY SYSTEM

by

FELICE BELSON GREENE

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1979

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

8/7/79
date

Gilbert Voyat
Chairman of Examining Committee

August 16, 1979
date

Martin L. Hoffman
Executive Officer

Gilbert Voyat, Ph.D.

Louis J. Gerstman, Ph.D.

Herbert Nechin, Ph.D.

Supervisory Committee

The City University of New York

Abstract

A COMPARISON OF SELF-DISCLOSURE PATTERNS OF THE SCHIZOPHRENIC AND NON-SCHIZOPHRENIC SIBLING WITHIN THE FAMILY SYSTEM

by

Felice Belson Greene

Advisor: Professor Gilbert Voyat

An experimental group of schizophrenic inpatients and Day Hospital patients (N=20), their non-schizophrenic siblings (N=20), and a control group of young adults (N=40) were compared on their report of past self-disclosure to parents. Parents of subjects in each group also reported an impression of the level of disclosure by their offsprings. A modified version of Jourard's 60-Item Self-Disclosure Questionaire was the measure used to assess disclosure to each parent, as well as offspring and parental satisfaction with the level of disclosure. A trait scale quantifying family members' liking for one another was also employed.

This study was related to psychogenic theories of schizophrenia based upon a family system model. It was expected that pathological family influences would be reflected in aberrant patterns of self-disclosure. Schizophrenics were expected to demonstrate an excessively close but erratic relationship with parents, while siblings were

expected to maintain exaggerated distance from parents.

Results of this study indicated that siblings (of schizophrenics) reported the lowest overall self-disclosure to parents. Schizophrenics disclosed higher than siblings but lower than controls. Female siblings were most disparate in their disclosures-- extremely low to father and high to mother.

Correlations between offsprings' report of self-disclosure to parents with parents' report of offspring disclosure to them were moderately high for control offsprings to mother, for siblings to both parents, and for female schizophrenics to father and male schizophrenics to mother. Gender effects were discussed in an attempt to account for these findings.

A factor analysis was utilized to distinguish topics of high, moderate, and low intimacy in self-disclosure. Schizophrenics were found to be more disclosing on high intimacy topics and less disclosing on low intimacy topics than either siblings or controls. Several factors were found to be gender specific in differentiating between subject groups.

An hypothesis that schizophrenics would experience more personal and parental dissatisfaction with their level of self-disclosure, and a greater tendency to misrepresent themselves was not supported. Schizophrenics and controls misrepresented in equal proportion, while siblings report-

ed few misrepresentations.

Liking for parents was not found to correlate with self-disclosure as was predicted. Nor did parents' liking for one another prove useful in defining family structural relationships.

In control families, extremes in self-disclosure, high disparity between offspring-parent reports, and high misrepresentation were associated with the following: one or more family members in therapy, severe physical illness of parents, or authoritarian parental attitudes. Discussion focused on low self-disclosure as an adaptive response in certain family situations. Jourard's association of high self-disclosure and good mental health was questioned as too unidemensional. Content, intimacy level, valence, gender, and relationship to target person were found to be important variables in self-disclosure.

The major finding that siblings were low self-disclosers to parents was seen as an extreme expression of an adaptive response to the family pathology and the implication for family therapy with schizophrenics was discussed.

ACKNOWLEDGEMENTS

There are a number of people who deserve recognition and my appreciation for the help and encouragement they provided during the course of this research.

First, I would like to thank the members of my committee. Dr. Gilbert Voyat, my chairman, responded with interest and flexibility during the seminal period in which this study was conceptualized. His ongoing support and intellectual acumen in all phases of the research was most appreciated. To Dr. Louis J. Gerstman I owe thanks for his enthusiasm and skill in statistically organizing the mass of data that initially seemed so overwhelming and obscure. I also appreciate his assistance in preparing the format for my measures and reviewing the final reporting of my results. I am grateful to Dr. Herbert Nechin for his encouragement and at times gentle prodding which set the pace for completion of this project.

I am deeply indebted to several people at Hillside Hospital, where this research was conducted. Dr. Allen Willner, of the research department offered constructive ideas at various stages of the work and read my manuscript under great time pressure. Dr. Arthur Willner, Director of Psychological Services facilitated my study by his formal sponsorship. Thanks are also due to the many social workers, psychologists, and psychiatrists who initiated my contact with subjects. Acknowledgement

of appreciation is also given to the many patients and families who made this research possible by giving of their time and "disclosing" themselves.

Finally, I wish to express the deepest appreciation and love to my husband Jack and our three sons, Jonathan, Daniel, and Andrew for their patience and encouragement throughout the busy days when I was preoccupied with academic concerns, and for their enthusiasm when my long sought goal was achieved.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Recently, the author served for an eight month period, as therapist in the treatment of a hospitalized schizophrenic patient, both individually and in conjoint family therapy with his parents and non-schizophrenic sibling. The patient had been treated as an inpatient in Hillside Hospital and was at the time a patient in the Day Hospital. Throughout treatment it was striking to note how insightful the patient was regarding the incongruent messages and demands focused upon him by both parents. While he communicated these insights to the therapist in private sessions, he became extremely anxious and disorganized when, in conjoint sessions, he was asked to share his perceptions with his family. This seemed yet another clinical example of a situation which has been identified in the literature on family systems as "the double-bind" (Bateson, Jackson, Haley & Weakland, 1956). The patient's discomfort seemed to derive from an incapacity to make his awareness of, and reaction to conflicting messages explicit to those presenting the messages. Identifying the incongruence would be considered a metacommunication; that is, a communication about a style of communicating by which the recipient of a message attempts to determine the order of an incongruent message to which he should give priority. By

doing so, he could defuse the pathological effect of a double-bind situation, a risk my patient would not take.

Olsen (1972), in an interesting review and conceptual reformulation of the double-bind, suggested that the schizophrenic's vulnerability is not the result of receiving incongruent messages from significant others, but rather that "...the more dependent the relationship in which the double-bind messages occur, the greater the resistance to clarifying these messages because of the potential risk of changing or losing the relationship" (p. 84). Olsen goes on to say that research to date has not demonstrated that schizophrenics are less able than any other group to discriminate conflicting messages, but that their problem might be an unwillingness or inability to metacommunicate because of these forces acting within the family.

What of the non-schizophrenic siblings in a family where double-binding communications are prevalent; are they similarly vulnerable? This question is a particular of the more general one which asks why one child in a family becomes schizophrenic, while others appear unaffected. Within the family being treated by the author, the non-schizophrenic sibling had maintained a more distant profile and avoided the expectations of his parents by leaving home. He decisively avoided communication with his nuclear family, and in fact his parents had always considered him a more private individual than his sibling.

Schizophrenia and the Family

The double-bind hypothesis is only one of a number of theories on the psychopathological influences in the families of schizophrenics. Early writings which grew out of the psychoanalytic treatment of these patients implicated a disturbed mother-child relationship as an etiological factor.

Fromm-Reichman's (1950) "schizophrenogenic mother" was an overprotective, overtly or subtly rejecting woman, conflicted by feelings of inadequacy in coping with the challenges of motherhood. In her relationship with her child she attempted to relieve anxiety generated by her relationship with her own mother. The schizophrenic offspring of such a mother, according to Fromm-Reichman, feels barred from the intimacy for which he longs by his fear of loss of control over his feelings. Mahler (1952) focused on the schizophrenic's inability to progress in a stable manner beyond the stage of symbiotic bond with his mother, or to perceive mother as a separate and constant object, with negative consequences to the schizophrenic's ego functions. Arieti (1955) in his early writings also subscribed to the critical role played by mothers in depriving their schizophrenic offsprings of security or trust in the relationship. However, more recently, Arieti (1974) in examining the aspects of family as an environment contributing to the etiology of schizophrenia, has implicated

the pivotal role of the father in determining the fate of a potential schizophrenic offspring.

Early clinical studies offered some support for the hypothesis of a schizophrenogenic mother (Gerard & Siegel, 1950; Lidz & Lidz, 1949). Ricks and Namache (1966) examined the child guidance clinic records of subjects later diagnosed as schizophrenic and found a high degree of symbiosis characterized by intrusive denial of the child's privacy of thought and action by the mother. The parents had been unable to tolerate their child's independence.

More recently, Burnham (1969) has attempted to unify a number of diverse theories represented in the literature by terms such as: infantilizing, overprotective, domineering, and symbiotic, under the general concept of "differentiation impeding mother-child relationships". In such a relationship the child has little opportunity to emerge with thoughts, feelings, and impulses he can validate as his own. Instead, he experiences himself as an appendage of his mother, accepting her definition of him as a price of closeness. Lacking autonomy and confidence in his adaptive resources he becomes, under stress of environmental and maturational influences, vulnerable to schizophrenic disorganization. Integrating this conceptualization with the family system approach, Burnham recognized that the blocking of individuation may occur in relation to other family members. Indeed, the pre-schizophrenic displays a penchant

to accept attributes which other family members repudiate in themselves by a process of projective identification.

Associated with differentiation impeding forces within the family are proscriptions against privacy and secrecy. In fostering a sense of oneness, there may be a strong prohibition against anger, defiance, or dissent. Dependence on the person who demands total disclosure makes it unlikely that these emotional responses can be handled without disorganizing defensive efforts. The schizophrenic's commonly reported delusion of having one's mind read or influenced can be understood in this context. As the schizophrenic generally lacks resources to leave his parents and feels acceptable only when he is in accord with their perceptions, he may struggle with a secret self and make heavy use of denial and repression.

In the 1950's and 60's interest in family therapy as a treatment modality grew in conjunction with a more sophisticated view of family dynamics. Emphasis was increasingly placed on the total family system rather than dyadic interaction between the single parent and child. Several major groups of researchers independently conducted clinical studies which depicted deviant communication patterns in families with a schizophrenic member (Goldstein & Rodnick, 1975). Bateson's work on double-binding has been mentioned. Wynne and his group (Wynne, Ryckoff, Day & Hirsch, 1958) focused on the concept of "pseudomutuality"

defined as a process in which family members are expected to maintain an illusory and idealized sense of love and agreement through denial of ambivalence and hostility. By this means anxiety is allayed and a facade of meaningful relationships is maintained at the expense of authenticity and differentiation of family members (Burnham, 1969). A contrary, but essentially similar pathology, "pseudohostility" can be found in families that deny the meaningfulness of their relationship and deal with the anxiety generated by intimacy through a process of ritualized animosity (Searles, 1965; Wynne et al., 1958).

It has been reported (Olsen, 1972) that Wynne considers double-binding and pseudomutuality similar concepts; the former placing emphasis on the contradictory aspects of communication, while the latter examines more closely the nature of the relationship context in which contradictory messages are implemented. Stierlin (1977) also drew parallels between pseudomutuality and the more general concept of the "family myth". Family myths are overdetermined joint strategies for "obscuring and bypassing painful conflicts and confrontations between members" (p. 200). As such, they employ the defenses of denial and idealization, and frequently result in the projection of disowned "badness or madness" on the identified patient, who becomes a cooperating victim.

Another group of clinical researchers under the lead-

ership of Lidz began with an interest in examining diadic communication between parent and child and moved toward an understanding of synthesized relationships between all members of families of schizophrenics. Influenced by a psychoanalytic tradition, their focus was placed on the dynamic elements of the exchanges rather than communicational deviance (Lidz, Fleck & Cornelison, 1965).

Lidz emphasized structural deficiencies in the family relationships of schizophrenics. Family structure begins as a biological given with parents serving different but interrelated functions. The mother's role is an "expressive affectional" one; the father fulfills "instrumental-adaptive" functions. Lidz et al. wrote:

> We posit that for spouses to form a family conductive to the integrated development of their offsprings, they must form a coalition as parents, maintain the boundaries between generations, and adhere to their respective gender-linked roles.... None of the families with schizophrenic offspring studied met any of these several conditions. (p. 369)

The authors described two pathogenic family structures "schismatic" and "skewed" in which the above conditions are not met. The schismatic family is characterized by overt marital discord in which role reciprocity, satisfaction, or emotional support between spouses is impossible to achieve. The "malignant" tendency to compete for the children's affections and loyalty is pervasive, either to injure the other spouse or to gain a subsitute source of gratifi-

cation through the children. Lidz examined eight families that fit this pattern and identified three subtypes, of which the most prominent involved a husband who asserted dominance to a pathological degree as a defense against underlying feminine-dependent strivings, and in so doing contended with a defiant and disregarding wife. Lidz' second subtype was one in which the wife's domination and coldness toward her husband led to his emotional withdrawal in order to preserve his integrity. In the third subtype, there was mutual resentment and withdrawal of support with both partners attempting to dominate the marriage.

Lidz postulated that in the schismatic family, the schizophrenic is caught in the schism to a greater degree than his siblings. He may serve as the scapegoat, the peacemaker, or become "caught" in a bind in which loyality to one parent means rejection by the other in spite of efforts to play a neutral role. He may even seek out a gratifying alliance with one parent, alienating the other in the process. Lidz et al.(1965) stated that "the widely discrepant attitudes and directives of the parents cannot be integrated within a single child - the irreconcilable parents become irreconcilable introjects" (p. 247).

In the skewed family, the pathology of one spouse dominates the marriage but a degree of outer harmony is preserved by the acquiescence of a dependent or masochistic spouse. The dominant spouse thus achieves narcissistic

gratification while the masking of potential conflict and self-sacrifice on the part of the more dependent spouse is apparent. Lidz has been unclear about the sex of the dominant spouse in these relationships. His more recent papers suggest that dominant wives with weak husbands predominate and are most pathognomic.

The authors presented extensive clinical data to support the view that the personality development of the identified patient and to a lesser degree, his non-psychotic sibling is influenced by these structural patterns in the family.

Empirical research in this area has suffered from a difficulty operationalizing the abstract hypotheses offered. Mishler and Waxler (1968) using an experimental approach, found support for a symbiotic bond between mother and schizophrenic offspring, in that schizophrenic males, in contrast to "normal" males, tend to speak to and receive more attention from mother than father. Mishler and Waxler (1968) examined the research generated from the theories on the double-bind, pseudomutuality, and the skewed and schismatic family, and concluded that it was impossible to compare these theories because they lacked intervening variables for purposes of empirical research. Intermediate concepts by which high order abstractions and low order variables and observation could be related have been lacking (Riskin & Faunce, 1972). The effect has been that

variables with quite vague ties to the original theories have been used as measures in experimental research. These have included studies of dominance and conflict measured by, for example, who talks most or who yields to other family members in a judgmental task. Goldstein and Rodnick (1975) pointed out that:

> Ultimately research measures must be consonent with the complexity of the original theory they seek to test. They must not be distortions of concepts critical to that theory of hypotheses. (p. 50)

They also pointed out that in spite of diversity of measures and looseness of construction between theory and behavior, certain "robust trends emerge" bearing out the general position rather than the specific hypotheses. While the authors examined only direct observational studies, they pointed out that such studies are strongest when revealing stylistic differences in communication and weakest in revealing subtle aspects of the relationship that usually occur in the privacy of the home or in long term family therapy.

The Schizophrenic and His Sibling. In their review of the literature on the family's contribution to the etiology of schizophrenia, Goldstein and Rodnick (1975) indicated that few studies, with the exception of those described below, attempted to use the sibling discordant for schizophrenia as a control. They suggested

that studying the sibling in direct interaction with the family is discouraged by logistic problems such as obtaining the required families and dealing with the resultant complexity of design. Nonetheless, they believed that contrasting the schizophrenic with his sibling would be a fruitful avenue of research.

Early clinical studies, by the nature of their in depth approach, were able to incorporate an investigation of family dynamics which included the siblings. Laing (1964) in his classic book Sanity, Madness, and the Family described indepth the interactions of several families with siblings discordant for schizophrenia. He found the schizophrenic patient was labeled by his family with an attribute, that when accepted by himself, eroded the self-evaluative function. Essentially weak, the schizophrenic was allowed no mind of his own. Laing cited instances in which a patient was able to make his authentic attitudes known only within the context of the family therapy session where the therapist provided supportive validation. This suggested that the patient did not feel free to take risks by making self-disclosures, when communications were discrepant with the family position.

Meissner (1971) examined the question of why one offspring develops clinical manifestations of schizophrenia while others do not. He concluded that the identified patient serve a dynamic function within the family struc-

ture but raised the specific question of what factors operate to select a particular child.

The Lidz group studied influences of the disturbed family system on all family members including the siblings (Lidz et al., 1965). They suggested a number of factors bearing on the specific child's pathological development. Early vulnerability, childhood illness, or retarded developmental milestones might focus more maternal attention on one child. Family crises contiguous with the birth or early development of a particular child might be pathogenic. A child might become a replacement for a lost child or other family member with the result that he would have difficulty meeting the displaced expectations of his parent(s). Parents' pathology may be exacerbated by provoking qualities in one offspring. By far the most influential variable was considered the sex of the offspring (see below).

An important finding was that the level of sibling pathology was much higher than could be expected in the general population. It was found that flight from the family through exaggerated independence, and constriction were the major characteristics of siblings who had made reasonably adequate adjustments. Lidz viewed the former as an adaptive function which allowed the healthier sibling to separate emotionally from pathological influences in the family.

Several other studies have been in agreement with the Lidz findings. Lu (1961, 1962) found that the mothers of schizophrenics had been inclined to leave non-schizophrenic offsprings alone readily during their childhood but could not tolerate without undue anxiety even brief separation from the child who later became schizophrenic. Though the relationship was fraught with hostility and stress the child became compliant and dependent, while the non-schizophrenic tended to increasingly ignore parental demands. These factors reportedly preceded the schizophrenic breakdown by some years. Alanen (1971) found a greater degree of pathology in siblings of schizophrenics as compared to siblings of neurotics. He also found a tendency for same sex siblings of schizophrenics to be more seriously disturbed than were opposite sex siblings, thus implicating gender as an important factor of vulnerability within a specific family constellation.

Pollack, Woerner, Goldberg and Klein (1969) studied a large sample of siblings of indexed schizophrenics at Hillside Hospital (the facility from which the present study drew subjects). Though they found concordance for schizophrenia of 8% (approximately the same as the Lidz studies) they failed to find the high percentage of other pathology in siblings as reported by Lidz, Lu, and Alanen. In addition, they found no evidence for greater abnormality among same-gender siblings of schizophrenics.

There have been several studies of twins discordant for schizophrenia by a group of researchers, Mosher, Pollin and Stabenau (1971) whose most recent summation on 11 sets of twins explored issues of identification and submissiveness as well as degree of pathology. They found that schizophrenics were more submissive than their twins and identified with the less emotionally healthy parent. Although gender for each pair was reported, it was not considered as a factor in analysis of the data. Further, twin studies while a prime method for identifying genetic concomitants of schizophrenia, are less reliable in looking at family interaction since the presence of twins creates particular stress in a family and results may not generalize to a more heterogeneous population.

Hoover and Franz (1972) examined a large sample of siblings (57) of indexed schizophrenics (30) rating the siblings for pathology and degree of family entanglement and level of functioning. Their findings indicated that siblings did not fit into a pattern, but were characterized by different survival styles within the family of origin. These authors' failure to examine male and female siblings separately, probably confounded the result since degree of family entanglement would be culturally different for men and women.

Gender Effects in Families of Schizophrenics. As mentioned, several studies touch peripherally on

the vulnerability of the same-gender sibling. Lidz and his associates considered variables related to gender a central consideration in the concept of the schismatic and skewed family. Vulnerability for the male offspring appeared greater in the skewed family, while schismatic families seemed more likely to generate schizophrenic pathology in female offsprings.

In the skewed family, the dominant parent seeks substitute gratification for an unhappy marital relationship through overinvolvement with the opposite sex child, with the result that appropriate ego boundaries are not set. Further, the child's capacity to internalize a positive identification with the same sex parent is compromised by the parent's weakened status in the family, and inability to serve as an adequate role model. Since by cultural definition, weakness is more pathognomic for males, it is the male offspring of a dominant mother who is particularly vulnerable. A serious consequence is that oedipal attachments are neither resolved or properly repressed and the preoedipal identification of the boy with his mother is never overcome. Lidz and his associates (1965) stated that "In such situations, particularly when the father was highly rivalrous, the son had realistic grounds to fear both the father and the engulfing mother who was turning him into an adjunctive, castrated figure like his father" (p. 268).

In the schismatic family, alliances are drawn in which rejections and seductions play a prominent part. These seem to operate differently in families with same sex siblings and those of mixed sex siblings, with the female more vulnerable in the latter case (Lidz et al., 1965). Females appear to be damaged in schismatic families where the mother is devalued in the conflict with the father, and thus provides a poor role model for her daughter. If the father and daughter seek comfort and affection from one another in the face of the mother's coldness, the daughter herself becomes vulnerable to the father's confusing combination of seductiveness and disparagement of women.

Mishler and Waxler's (1968) extensive and complex study found support for Lidz's differentiation of the effects of skewed and schismatic families. There appear to be an association between families that expressed less open conflict and hostility (skewed) and lower index of "negative interpersonal expressiveness" by male schizophrenics. Female schizophrenics more frequently were associated with families in open conflict (schismatic) and while females tended to be generally more isolated and non-communicative than males, nevertheless, expressed a higher level of "negative interpersonal expressiveness", that is more hostility, to their families.

Unfortunately, only a few of the studies already cited from the literature, control for the sex of the identified

patient. Since this is an important variable it would be erroneous in any family study to treat the sexes homogeneously (Jacob, 1975; Mishler and Waxler, 1968, Sathyavathi, 1974).

Relationship patterns are established in early life, but etiological questions have been hampered by reliance on retrospective data, based on parental recollections. Behavioral studies suffer from the weakness of a semi-structured situation as a representation of daily life. Perhaps the etiological factors can be best approached by high risk studies which examine early interactions in families in expectation that subsequent identification of schizophrenics in the sample would provide the criterion variable.

Beyond the question of etiology, there is value in studying current family relationships in ways that do not unduly oversimplify or narrow the focus of inquiry. Since present day clinical practice often returns the schizophrenic to the community promptly, it is vital that there be an understanding of the forces which will be exerted on the patient in his environment. If in fact, there is as we proposed, a pathological family system, and if the returning patient become re-embedded in that system, he is more likely to experience symptom renewal. Intervening on the family level may alter the pulls toward recividism.

As Goldstein and Rodnick (1975) state in their review

of the current status of family studies on schizophrenia:

> These [Lidz, Bateson, Wynne] clinical findings generated extensive research activity ... perhaps reflecting an awareness of their potential value in generating a family treatment strategy that would attempt to modify the family environment which was thought to maintain psychosis in the schizophrenic offspring. (p. 48)

How to intervene effectively remains an important question. Does the therapist encourage increased communication and disclosure of feelings and attitudes between family members or perhaps aim for "change through interactional processes set off when a therapist intervenes... independently of the awareness of the participants and how they have been behaving " (Haley, 1971, p. 7).

A central aim of this study was to consider this question in relation to the strategies employed by the schizophrenic and his sibling in communicating with parents. Do these patterns suggest a defense against the family pathology? It may well be that the goal of the therapist should be to facilitate the process of escape which is reportedly exemplified by the detached behavior of the sibling. Open communication and self-disclosure between family members must then be considered pro and con in relation to that goal.

Family studies of schizophrenia suggest two problem areas affecting communication that might be studied. One has to do with the risk inherent in a family member sharing

personal information which threatens the family mythology, its perception of roles, and system of interactions. The other concerns the implicit demand within a dyadic relationship characterized as symbiotic, for an intimate sharing of secretly held thoughts and feelings; an intrusive denial of boundaries permitting no privacy. These two influences are conceived as countervalent forces acting on, and being reacted to by the schizophrenic. It, therefore, seems reasonable that an examination of the patterns of self-disclosure by the schizophrenic in relation to other family members might elucidate the influence of these forces on the family system.

Self-Disclosure

Self-disclosure may be defined as the information which a person communicates about himself to another person. There have been other terms such as "social accessibility" (Rickers-Ovsiankina, 1956), and "verbal accessibility" (Polansky, 1965) employed in the literature to define what Cosby (1973) considers the same concept, but the most commonly used term, "self-disclosure" introduced by Jourard (1959) has generated the largest body of research. Self-disclosure has been conceptualized as both a personality construct and a process which occurs during interaction with others.

Though Jourard and his associates directed their research to populations which fall within the so called

"normal" spectrum, he theorized that the inability to disclose oneself to significant others is both a sign of, and an etiological factor in mental illness. Jourard (1964) wrote:

> We conceal and camouflage our true being before others to foster a sense of safety, to protect ourselves against unwanted but expected criticism, hurt, or rejection. This protection is purchased at a steep price. When we are not truly known by the other people in our lives, we are misunderstood. When we are not known, even by family and friends, we join the all too numerous 'lonely crowd'. Worse, when we succeed too well in hiding our being from others, we tend to lose touch with our real selves, and this loss of self contributes to illness in its myriad forms. (p. 111)

Jourard was concerned with the impact of chronic misrepresentation of self and inauthenticity upon one's self-concept. Inauthenticity was described, in turn, as a defensive reaction to painful and discomfirming messages by one's family early in life. This cycle of having one's identity defined by others, believing it, and then projecting that image of oneself was seen as the basis for endless confirmations of alienated self which is growth arresting.

Jourard believed that self-disclosure is the obverse of both repression and self alienation. He stated (1964) that "defensiveness and concealment of self before others are the same modes of being that screen off a man's unconscious from himself."

Historically, the psychoanalytic movement developed out

of efforts to understand and treat those whose symptoms reflected an inability to tolerate what might be considered intra-personal disclosures, that is, disclosure to oneself. Psychoanalysis can be described as a process by which an observer (therapist) teaches the observed to become more self-observant through gradual self-disclosure to another. This approach to the alleviation of emotional disturbances began with Freud's (1893) use of the "cathartic method" to relieve his patients of their neurotic symptoms. By means of gradual self-disclosure to a respected authority guilty secrets lost their power to overwhelm the personality.

Jung (1953) stressed the danger of concealing one's authentic self beind a social facade which he designated as the "persona" in his personality system. If this persona becomes the focus of the individual's identification, there is a risk of self-alienation and becoming a unidemensional character lacking the qualities of an autonomous human being.

Theorists concerned with the impact of social forces on the personality have articulated still further the inherent dangers in self-concealment. Horney (1945) described how "neurotic detachment" and avoidance of intimacy become associated with estrangement from the self, an uncertainty of one's feelings and beliefs and a numbness of emotional experience. Fromm (1947) called attention to the capacity for misrepresentation of self to others in the "marketing personality", while Reisman (1956) defined the

"other directed" character as one who presents himself inauthentically for purposes of self-protection. The need to maintain self-esteem by gaining the constant approval of others must be understood in the context of early life experiences of emotional deprivation. Lacking early parental confirmation of his worth, leaves the person without capacity to internally regulate self-esteem.

Sullivan (1947) emphasized the sequence of interpersonal experiences which shape personality. The self consists of "reflections of the appraisals of 'significant others'." Of course, it is the child, who having few other sources of "consensual validation", relies upon his parents for confirmation of his identity. Malevolent parental influences are likely to result in a personification of a "bad me" which then closes off objective self-evaluation.

Focusing on positive aspects of personality, Maslow (1970) described the "self actualized" person as open and frank in his intimate relationships and accepting of himself and others. Implicit in his theory was a positive relationship between one's self concept, personal adjustment and capacity for self-disclosing behavior.

Jourard stressed the relational aspect of (verbal) self-disclosure as a means of expurgation. In the unhealthy personality there may be a marked discrepancy between ones "unexpurgated real self" and one's "public self". The former was related to Sullivan's "bad me" and encompasses all those

aspects of the person which are shamefully hidden from others and, in part, oneself. The public self is one's presentation of oneself to the world at large. If the discrepancy between these two selfs is great, there will be danger in the presence of others. If being known is threatening, then such a presence can evoke anxiety. Neurotic and psychotic symptoms might be viewed as "smoke screens" which a person imposes between himself and the attention of others. Jourard referred to the personal account of an anonymous writer, an ex-patient who defined his schizophrenic episode as a break with "sincerity" rather than "reality" (1964, p. 25).

Research on Self-Disclosure and Mental Health. Though numerous theoretical writers have stressed the relationship between mental health and self-disclosure, empirical studies have been somewhat inconsistent in their findings.

Most of the studies have used one of the Jourard Self-Disclosure Questionnaires, or a variant of these instruments. Jourard and Lasakow (1958) developed an instrument measuring the degree of self-disclosure by individuals to four target persons: mother, father, same sex friend, and opposite sex friend. This sixty item questionnaire subdivided into six content areas served as the prototype for variations of the scale that differ on a number of dimensions including length, target persons, and nature of the

items. Pederson and Higbee (1968) reviewed the differences between scales and concluded that there was a tacit assumption in the literature that the various measures were equivalent.

Jourard's writing suggested a theoretical relationship between self-disclosure and good mental health. Operationalizing the construct mental health so that this relationship could be tested empirically has been approached by differing means. Some studies employed samples from normal populations (as distinct from clinical populations) and attempted to correlate some measure of self-disclosure, usually by Jourard, with one or more measures of disturbed emotional functioning. Other studies contrasted the self-disclosure patterns of clinical populations (neurotic and/or psychotic) with normal controls. Some studies approached the question more positively, examining relationships between self-disclosure and positive aspects of mental health. Of these, the concept of self actualization has been most frequently used.

Of the studies which have used the first method and found support for Jourard's hypothesis, the correlations were not impressive. Pederson and Higbee (1969a) found significant negative correlations for female subjects between disclosure measured by the 60-item Jourard Self-Disclosure Questionnaire and the Neuroticism and Cycloid Disposition Scales of a personality inventory based on the

Cattell 16PF and the Guilford-Martin Inventories. Correlations were particularly strong with the father as target person; Neuroticism -.46, Cycloid Disposition -.40. The correlations dropped to -.30 and -.28 respectively for total scores on self-disclosure summed across the four target persons. This suggested that the more emotionally stable the female, the more likely she was to disclose, particularly to her father. For males, however, the results were contrary; that is, males who disclosed more, particularly to their best male friend, tended to be emotionally unstable and more meditative. The general findings that females disclose more than males was consistent with most previous findings on sex differences in self-disclosure (e.g. Himelstein & Lubin, 1966; Jourard & Lasakow, 1958). The results of this study indicated that self-disclosure as a correlate of mental health should be examined both in regard to expectations for each sex and in regard to the specific relationship between the discloser and the target person.

Results in the literature have generally been consistent with social expectations for self-disclosure to operate differently in men and women. Women are generally viewed as more verbal, more expressive of feelings, while men are expected to be less introspective and to relate to others around instrumental behaviors. These differences may have some biological roots but social learning plays a prominent

part in their establishment (Maccoby & Jacklin, 1974; Parsons & Bales, 1955). Therefore, it is not surprising to find women more disclosing than men.

Studies employing measures of emotional maladjustment have reported contradictory results. Stanley and Bownes (1966) using the Mandsley Personality Inventory neurotic scale on college students found no correlation between neuroticism and self-disclosure, while, as was mentioned earlier Pederson and Higbee found that in males, disclosure to friends was negatively correlated wtih mental health on their personality inventory.

In part, the problem may be finding an appropriate criterion variable, especially when applied to a relatively homogeneous population of college students from which typical samples have been drawn. Using four scales of the MMPI on male naval recruits, Taylor, Altman, and Frankfort found low but significant correlations with self-disclosure (Cozby, 1973), while Persons and Marks (1970) varied two of the four MMPI scales and found a negative correlation with the reported self-disclosure of male prisoners. The conflicting results may reflect a problem with using the MMPI on populations different from that on which it was standardized.

There are few studies which have examined self-disclosure in a patient population. Mayo (1968) contrasted

three groups of women: inpatients with a neurotic diagnosis, "normals" with neuotic symptoms and normals, on a Jourard measure of self-disclosure and found that normals reported a higher level of self-disclosure than the other two groups. The neurotics who had "broken down" were more clearly differentiated from neurotics who had not broken down by their reports of receiving less disclosure from others than they gave. Their appraisal of a lack of mutuality in relationships may reflect a tendency to monopolize conversations. It would seem that mental disturbance may express itself in extremes within the realm of self-disclosure.

Jourard (1964) and others (Cozby, 1973; Gilbert, 1976) raised a similar issue in proposing that the relationship between mental health and self-disclosure is a curvilinear one, with individuals who are poorly adjusted tending to make either high or low disclosures indiscriminantly to others in the social environment; while those with positive mental health are characterized by high disclosure to a few significant others and moderate disclosure in general. The recommendation was made that future research examine correlation ratios to detect departures from linearity.

Shimkunas (1972) examined the self-disclosing behavior of chronic schizophrenics in an interview situation. Consistent with the theories of Sullivan, Haley, and Jourard he expected and found that his subjects became markedly

delusional and autistic under a demand for intimate self-disclosure. The findings supported the hypothesis that the schizophrenic's symptoms are a response to the threat of interpersonal intimacy.

Regarding studies which examined the relationship between self-disclosure and positive mental health, establishing appropriate criteria has been, according to Cozby (1973) the major difficulty. The concept of positive mental health which comes closest to Jourard's meaning is that of the self-actualizing person (Maslow, 1970), the ability to grow and develop fully as a person.

Cozby (1973) reported a study by Vargas as appropriate in the choice of the concept of self-actualization as criterion. However, he suggested that the use of a standardized measure such as the Personal Orientation Inventory (POI) might yield more valid results than the measure employed by Vargas. Following this recommendation, Lombardo and Fantasia (1976) found that high disclosers compared to low disclosers had achieved a higher level of self actualization as measured by the following subscales of the POI: Time Competence, Internal Support, Existentiality, Self Acceptance, and Capacity for Intimate Contact. Further, the study found that self-disclosure was associated with adjustment as measured by scales of Social Avoidance and Distress, Fear of Negative Evaluation, Alienation and Repression-Sensitization. This study examined the data through correla-

tional analysis and analysis of variance and the results suggested no basis for inferring a curvilinear relationship between self-disclosure and adjustment. However, it must be remembered that such a relationship may exist only in populations containing extreme unhealthy, nonfunctioning individuals who, as previously described, may demonstrate extremes in self-disclosure. The majority of evidence from this research did support Jourard's hypothesis that by disclosing oneself to others, the person comes to know and accept himself and is, therefore, better adjusted and self-actualized.

Halverson and Shore (1969) studied male and female Peace Corps trainees and found the following correlated positively with high scores on a self-disclosure questionnaire: interpersonal flexibility, adaptability, conceptual complexity, and peer nomination on a sociometric inventory Authoritarianism showed negative correlation with self-disclosure. The correlations ranged from .30 to .41.

However, studies which employed the Marlowe-Crown Social Desireability Scale as a measure of self protective conforming defensiveness found no significant relationship between that measure and reported self-disclosure to significant others in the past (Burhenne & Mirels, 1970; Doster & Strickland, 1969).

Self-Disclosure Within The Family. What a person is willing to disclose about himself relates to qualities in that person such as age and interpersonal trust, relates to attributes of the person to whom he is disclosing (i.e. the target person) and finally depends on the relationship between them. In many studies, four target persons were considered: mother, father, best male friend, and best female friend (Jourard & Lasakow, 1958; Jourard, 1959). One parameter of interpersonal relationships which was found significantly related to the level of disclosure has been the degree of liking for the target person (Fitzgerald, 1963; Jourard, 1959). This effect is particularly important within the family.

Pederson and Higbee (1969b) investigated aspects of the relationship between male and female disclosers to their parents. The relationships were assessed by the subject's rating of his parents on eleven adjective pairs in dimensions such as close-distant, unselfish-selfish. Of particular interest was the finding that male subjects related high self-disclosure to mother only to qualities of closeness and warmth, while disclosure to father related to eight factors including interested, friendly, fair, unselfish, good, liking, as well as closeness and warmth. For female subjects, disclosure to mother was related to her demonstration of unconditional maternal love and apparently independent of character traits such as fair and unselfish.

The disclosure of females to their fathers was slightly more discriminating than to their mothers but less discriminating than the disclosure of males to their fathers. This suggested that disclosure of children to their mothers is more independent of how their mother relates to them than disclosure to father is of how he relates to them.

Doster and Strickland (1969) found that male and female offsprings in families reported as nurturant disclosed more to their parents than did offsprings of low nurturant families who tended to disclose more to friends. The author found only a tendency toward higher disclosure by females than males but a significant interaction between sex and target person which indicated that females disclosed more to mother than father, while males were equally disclosing to each parent.

Jourard (1964) found that the subjects who experienced themselves as being held in esteem and accepted by their parents were more willing and secure in revealing information to them than were subjects who felt estranged from their parents. Jourard wrote that there is frequently an uncomfortable gap in communication between parents and that they and their children are often strangers to each other. Watzlawich, Beaven and Jackson (1967) have indicated that lack of clarity and double-bind messages appear to be common manifestations of disturbed communication within families.

Earlier, the nature of the relationship between dis-

closer and target person was mentioned. An important parameter in interpersonal relations within the family is the communality of viewpoint within the interindividual sphere. In order for exchanges of information to occur in that sphere both communicants have to agree upon the meanings of their words and maintain a consistent level of reference. If what is disclosed one moment loses its validity and is contradicted the next moment, it cannot be considered a true disclosure. In order for there to be valid interindividual exchange, intraindividual thought processes must have passed beyond the egocentric mentality of the pre-operational level, in a Piagetian sense, and not have regressed back to that level. Social exchange, like cognition is based on an equilibrium that encompasses reciprocity and awareness of the others point of view. (Voyat, 1978). To the extent that communications are expressed in metaphoric language where there is a confounding of levels of abstraction as may occur in a thought disorder, or in a double-bind message, disclosure is subverted.

The few empirical studies already mentioned dealt with disclosure patterns within the normal family. There were only two additional ones which related specifically to pathological families. A study by Ferreira & Winter (1968) differentiated families showing evidence of pathology from so called "normal families" and found the former group's communication patterns less free, explicit, and frequent

than were the latter. Alexander (1973) found that in disturbed families there was more evidence of defensive communication than support.

Objectives and Hypotheses

The major objective of this study is to evaluate communication patterns in the families of schizophrenics to determine whether there are any manifestations of what might be considered pathological family relationships. To do so, it is proposed to examine ways in which schizophrenics and their siblings differ in the amount, nature, and quality of self-disclosure to each parent. The aim of the study will be to apply this information to the formulation of an approach to family therapy. If there is evidence of pathology in the families of schizophrenics, and if the siblings discordant for schizophrenia demonstrate in their self-disclosure patterns, effective strategies for avoiding the impact of this pathology, then it becomes important to model such strategies for the schizophrenic in preparation for his return to the family after hospitalization.

To achieve the aforementioned objectives, patterns of offsprings' self-disclosure to parents, and parents' reports of their offsprings' disclosure to them will be studied. Three groups of offsprings' reports will be examined and contrasted: schizophrenics, their non-schizophrenic siblings, and a control group of offsprings from "normal"

families in the community at large. These groups will henceforth be referred to as schizophrenics, siblings and controls.

Self-disclosure will be examined by responses to a modified version of the Jourard Self-Disclosure Questionnaire.

The following hypotheses related to overall self-disclosure will be tested:

Hypothesis 1. Schizophrenics will report higher self-disclosure to each parent than will siblings, but lower self-disclosure than will controls. Siblings are expected to be the lowest disclosers of the three offspring groups.

Hypothesis 2. Parents' reports of disclosure by their offsprings will not correlate with their offsprings' self reports in the schizophrenic and sibling groups. However, there will be a high correlation between parental and offspring report in control families.

Hypothesis 3. Schizophrenics will show greater disparaties between overall self-disclosure to mothers as compared to fathers than will siblings or controls.

Hypothesis 4. Schizophrenics' overall self-disclosure to same-gender parents will be lower than the disclosure of siblings or controls to same-gender parents.

Hypothesis 5. Schizophrenics' overall self-disclosure to cross-gender parents will be greater than the disclosure of siblings or controls to cross-gender parents.

The first hypothesis is contradictory to the generally articulated theoretical relationship between mental health and high self-disclosure, which would hold that schizophrenics, as the most pathological group would report the lowest self-disclosure scores. Nonetheless, a paradoxical disclosure pattern is predicted, with siblings' lower disclosure reflecting their avoidance of intimacy and contact with the pathological family system. Thus, schizophrenics embedded in the family system are expected to disclose more than siblings but not more than controls for whom the expected positive relationship between good mental health and high self-disclosure is assumed to apply.

Hypotheses 3, 4, and 5 are consistant with the work of Lidz et al. (1965) and Burnham (1969). The schizophrenic is assumed to be bound excessively to one parent in an emotionally ambivalent love-hate relationship. Often this tie is tinged with incestuous impulses. The expected high level of self-disclosure to the cross-gender parent is based on an inability to differentiate and establish boundaries between parent and self. The siblings are expected to avoid such entanglements with the cross-gender parent. Controls are expected to maintain balanced disclosure to each parent.

The following hypothesis relates to a more detailed analysis of the nature and quality of material being disclosed:

Hypothesis 6. Schizophrenics will report a more

erratic pattern, and relatively greater levels of self-disclosure in highly intimate topics, and less disclosure on low intimacy topics, than will the siblings or controls. Siblings and controls will report greater disclosure on low intimacy topics and relatively less disclosure on high intimacy topics.

This hypothesis is an expectation derived from the literature on normal populations who tend to disclose less as topics become more personal. The schizophrenic is expected to respond with inappropriately high disclosure to parental demands for intimacy.

The following hypotheses relate to offsprings' and parents' satisfaction with the level of self-disclosure and to the circumventing of self-disclosure by misrepresentation:

Hypothesis 7. Schizophrenics will report more personal and parental dissatisfaction with their level of self-closure, and more misrepresentations than will siblings or controls.

Hypothesis 8. Parents' reports of satisfaction will show a high correlation with their offsprings' impression of parental satisfaction in control families, and no evidence of correlation in patient families, for either schizophrenics or siblings.

These hypotheses are based on the assumption that schizophrenics have difficulty establishing a comfortable

and appropriate level of intimacy with their parents. The literature, in general, supports the theory of "differentiation impeding" relationships (Burnham, 1969) in which schizophrenics become entrapped. Having been denied the chance to develop interpersonal skills and sources of gratification outside the family constellation, they develop both a dependent and hostile position that becomes difficult to resolve. Expected to divulge their innermost selves to scrutiny, they must harbor intense fear that self-disclosure would evoke censure and rejection. Thus, they are expected to be unstable, erratic, and ambivalent in their pattern of disclosure. When they experience themselves withholding, they may feel or project an expectation of increased demand for self-disclosure from the significant parent. When impelled to disclose or to misrepresent, they may be expected to feel inauthentic, cowardly, and thus experience a severe loss of self esteem. Since the schizophrenic has difficulty fleeing such a dilemma, it is proposed the sibling is able to, he may be subject to the ultimate defense: disorganization reflected by obscure thoughts and communications.

This study will also consider the relationship between liking for a parent and self-disclosure to that parent. Liking will be determined by a measure in which subjects rate the target person's character traits subjectively in terms of their feelings.

Hypothesis 9. Schizophrenics' self-disclosure to each parent will not be correlated with liking for the parent to whom disclosures are made. The self-disclosure of siblings and controls to each parent will correlate highly with the degree of liking for the parent to whom disclosures are made.

This hypothesis assumes that schizophrenics disclose to parents because they cannot tolerate withholding while preserving a symbiotic tie. The siblings who are less subject to these forces, and the controls are expected to show an association between liking for the target person and self-disclosure to that person, as reported in the literature.

It is assumed that liking of the spouses for each other will provide an operational measure for identifying skewed and schismatic families. It is proposed that schismatic families be identified by low rating of each parent for the other. Skewed families shall be defined as those in which one parent reports significantly lower rating of the spouse than does the other parent, thus indicating unilateral devaluation.

Hypothesis 10. In families identified as schismatic, offsprings will demonstrate an alliance (higher rating), each with an opposing parent. The schizophrenic will be allied with the cross-gender parent and the sibling with the same-gender parent. There will be a greater number of female schizophrenics than males within this family structure.

Hypothesis 11. In families identified as skewed, all offsprings will report lower rating of liking for the devalued parent (the one who is rated lower by the spouse). Further, there will be a greater incidence of male schizophrenics in these families, particularly if the mother is the dominant parent.

CHAPTER II

METHOD

Subjects

Subjects in this study consisted of twenty schizophrenic patients of Hillside Hospital, and selected family members: mother, father and one non-schizophrenic sibling for each patient. These eighty subjects constituted the experimental group, with the twenty siblings serving as a contrast group to the schizophrenics (hereafter referred to as patients).

A control group consisted of twenty families in the community, each represented by a mother, father, and two offsprings for a total of eighty subjects.

The patient group was drawn from the Day Hospital and open inpatient units of Hillside Hospital, a private, voluntary psychiatric facility in Glen Oaks, New York, affiliated with Long Island Jewish Medical Center. There are approximately eighteen patients treated in each unit of the hospital by a staff which includes a senior staff psychiatrist permanently attached to it, a psychologist, two social workers, two recreational therapists and two nurses. The inpatient units have one additional psychiatrist and additional nursing and aide staffing. The ratio of patient to professional staff is approximately 2:1. The average length of stay is 90 days. Day Hospital patients may be admitted by transfer from an inpatient unit, from another

psychiatric facility, or from the community.

Before this research project was undertaken it was evaluated and approved by the Human Subjects Committee which also defined the procedure for informed consent (see Appendix A). Data collection began in September, 1978 and was completed in April, 1979.

Patients eligible to participate in this study must have graduated from high school or the equivalent and be within the ages 18 to 28 inclusive. They must have a charted diagnosis of schizophrenia according to DSM II (1968) standards including any of the following subcategories: chronic undifferentiated, paranoid, acute schizophrenic episode, residual type, schizoaffective. Diagnosis was made independently by the psychiatrist and primary therapist and reconfirmed in Initial Case Conference approximately two weeks after the patient's admission. The diagnosis of schizophrenia is made conservatively by the presence of a thought disorder in clinical interview or projective testing. Charts and treating staff were also consulted to eliminate patients suspected of, or showing evidence of brain dysfunction or those considered too disorganized or not sufficiently compensated to competently respond to the measures in this study.

Additionally, patients selected must have both parents alive and in contact with them. They must also have at least one biological sibling between the ages of 16 and 32

respectively who has no history of any psychiatric hospitalization or outpatient treatment with a diagnosis of schizophrenia. All patients meeting these criteria were asked to participate in this study. Eleven potential subjects refused to participate; four subjects did not complete the required questionnaires (because of emotional distress or lethargy); sixteen completed patient responses were eliminated from the study because one or more necessary family participants did not complete their portion of the data. One complete set of data was not included because all siblings had a record of previous psychiatric hospitalization. In all, twenty complete sets of data among the experimental group were collected for use in this study.

Control Group. Subject families for the control group were drawn from geographic locations similar to those of the patients in the study and were contacted through affiliation with two types of institutions. Fifteen of the families volunteering to participate in the study belonged to the social arm of a church or synagogue within the counties of Queens or Nassau (from which Hillside draws most of its patients). Five families were contacted through the college affiliation of an offspring (personally unknown to the researcher).

The colleges were chosen to balance the location and academic prestige of controls' school connection with those represented in the patient families. All control families

met the criteria for patient families with the exception that neither sibling had a history of psychiatric hospitalization, though several had been in outpatient treatment (as had some siblings).

All subjects in both experimental and control groups were Caucasian.

Relevant demographic variables for patient and control families are presented in Table 1. As may been seen from the table, socioeconomics, educational and religious background were fairly evenly represented in the two groups, except for higher representation of professional occupation in controls. Since Jourard (1971) reports that self-disclosure is affected by religious background the latter was considered an important variable on which to gain equivalent representation.

Demographic variables related specifically to offsprings are presented in Table 2. As may be seen, it was not possible to provide balanced representation by sex, since the determinant was the availability of siblings.

Table 3 presents the sex and age, and birth order of patients and siblings. As may be seen, there were four same-gender male pairs and three same-gender female pairs. There were eight male patient-female sibling pairs and five female patient-male sibling pairs. The heavy representation of male patients reflects the high ratio of male to female schizophrenic patients at Hillside Hospital and the

Table 1

Demographic Variables of Families and Parents

	Patient Families N = 20		Control Families N = 20	
Religious Representation				
Jewish	10		11	
Catholic	8		7	
Protestant	2		2	
Family Income				
Median (expressed in thousands)	$20 to $30		$20 to $30	
Range	$ 5 to $30+		$ 5 to $30+	
	Father N=20	Mother N=20	Father N=20	Mother N=20
Parents' Occupation				
Professional/ Managerial	4	1	11	1
White Collar	9	11	6	12
Blue Collar	5	1	3	1
Housewife		7		6
Retired	2			
Parents' Education				
Mean number of years	13.4	12.4	15.2	13.9

Table 2

Demographic Variables of Offsprings

		Patients		Siblings		Controls	
		Male	Female	Male	Female	Male	Female
		N=12	N=8	N=9	N=11	N=21	N=19
Mean Age		24.5	23.6	25	22.9	20.6	20.1
Mental Status							
Single	N	12	7	7	6	19	18
Married	N			1	4	2	1
Divorced	N		1	1	1		
Educational Level							
Attending High School	N			2	1	1	7
Attending College	N			1	3	14	8
Education Completed	N			6	7	6	4
Mean Years of Education		13.6	13.0	16.5	14.6	16	15.8
Occupation							
Professional & Managerial	N			1	1	2	
White Collar	N			4	1	4	2
Other	N			1	4		1
Housewife	N				1		1

Table 3

Sex, Age, and Birth Order of Patients and Siblings

Family	Patient Sex	Patient Age	Sibling Sex	Sibling Age	Birth Order Youngest to Oldest
1	M	25	M	30	M M M
14	M	26	M	24	M M M M F
19	M	28	M	30	M F F F M M
20	M	23	M	17	M M M
4	F	23	F	26	8 sisters, 4 brothers ages 19 to 39
6	F	21	F	16	F F M
16	F	25	F	20	F M† F F M
2	M	22	F	24	M F F F
7	M	22	F	21	F M M
8	M	24	F	28	M F
11	M	24	F	28	M F
12	M	25	F	23	M F M
13	M	22	F	24	M F F M M M
17	M	28	F	20	F F M F
18	M	25	F	22	F M
3	F	26	M	30	M F M
5	F	22	M	17	M F F
9	F	24	M	21	M F
10	F	22	M	32	F M† M
15	F	26	M	24	M M F (F M)

Note. Underscored letters indicate offsprings included in this study, single line for siblings, double line for patients. † indicates deceased; parentheses indicates half-siblings.

generally understood higher incidence of schizophrenia in males over females.

An inspection of the birth order section of Table 3 indicates that in all but 1 case (Family 17) it was possible to enlist the cooperation of a sibling closest in birth order to the patient. Our secondary aim was to select the same-gender sibling if the birth order criterion could be followed. In two instances (Family 7 and 5) the same-gender sibling refused to cooperate. This may be an important issue to discuss in terms of clinical implications.

Age differences between the offspring groups was identified as a possible confounding variable and examined statistically (see Results).

Relevant psychiatric data on patients is presented in Table 4.

Procedure

The experimenter arranged a brief introductory meeting with each potential subject through the patient's therapist and after consultation with that person. The experimenter explained that she is a staff member and that they were being asked to participate in a university research study to increase our understanding of communication in families with the goal of applying this knowledge to family therapy. Patients were told that their cooperation would be appreciated but they have the option of participating or not as they

Table 4

Patients' Psychiatric Data

	Males N=12	Females N=8
Diagnostic Subtype		
Schizo-Affective	1	2
Paranoid	5	3
Chronic-Undifferentiated	4	2
Acute Schizophrenic Episode	2	1
Mean Number of Psychiatric Admissions	1.78	2.4
First Psychiatric Admissions		
Age 17 to 19	3	2
Age 20 to 22	3	2
Age 23 to 26	6	4

choose. They were assured of complete confidentiality. All materials which they filled out were to have an identifying code number rather than their name. All records, answer sheets, and data sheets, were to be kept under lock and key. If agreeing to participate, the patient was informed that, following completion of the questionnaire, he or she would be asked for permission to contact parents and the sibling closest in age. A second sibling would be asked if the first was unavailable. If the patient agreed to the contacting of family members, a packet containing a covering letter, consent form, instructions and relevant questionnaires for each family member was sent. (Appendix A). Self addressed, stamped envelopes were provided for the individual's responses.

It is the practice at Hillside Hospital to involve family members in family therapy when deemed clinically appropriate, when the patient is sufficiently stabilized to permit this intervention to be constructive, and when the patient or family is not resistant to therapy. Those family members visiting the hospital for therapy sessions were handed the packets by the social worker serving as family therapist. This person remained uninvolved except to identify the sender of the material as a staff member. When not accessible in this manner, family members were sent the packets by mail. This method was employed in order to most closely duplicate the conditions under which control sub-

jects filled out their questionaires. Follow up phone calls were made to each member to answer general questions about the study and to clarify instructions if necessary.

Patients were the only subjects to fill out the questionnaires in the hospital in small groups of approximately 3 to 5. This was done to provide an informal non-anxiety provoking situation and to offer reassurance if patients were made anxious by the task. A modified Jourard Self-Disclosure Questionnaire (see Appendix A) was filled out by the subjects after the instructions were read aloud by the examiner. Following this portion of the procedure, the Parent Trait Questionnaire was similarly administered. Patients were not asked to fill out a demographic survey, as were other subjects, since detailed histories were included in their hospital charts.

Measures. A variation of Jourard's 60 item Self-Disclosure Questionnaire (JSDQ) (Jourard and Lasakow, 1958) was the primary instrument. Jourard's original questionnaire consisted of 10 items in each of 6 content areas which were considered to relate to various aspects of the self. The six areas were: attitudes and opinions, tastes and interest, work or studies, money, personality, and body. Subjects were asked to respond to each item by indicating the extent to which the information had been revealed to four target persons: Mother, Father, Best Opposite-Sex

Friend, Best Same-Sex Friend. (The present study concerns itself only with disclosure to Mother and Father.) Items were scored as 0 - non-disclosure, 1 - disclosure only in general terms, 2 - full disclosure, X - misrepresentation or false presentation. Numerical entries were summed (X's were counted as 0), yielding totals which constituted the self-disclosure scores.

The present study followed Jourard's scoring system for self-disclosure with the change that misrepresentations were scored— minus one to differentiate them from no disclosure. Jourard's procedure had been called to question by Kramer (1978) in a dissertation using the JSDQ on a schizophrenic population at Hillside Hospital. It was felt that misrepresentations were a more extreme non-disclosing behavior than no disclosure and, therefore, should be weighted more. This author agrees with that position.

The present study added a new dimension to the questionnaire by asking offsprings to rate their satisfaction regarding their level of disclosure and also their impression of parental satisfaction. The ratings were on the following scale: 1 - satisfied, 2 - wish more was disclosed, 3 - wish less was disclosed. Each offspring filled out two questionnaires, one regarding Father, the other regarding Mother. The parents were asked to report on their estimation of the disclosures of each offspring participating in the study. They were also asked to rate their own level of satisfaction.

In the present study two of the six scales from the 60 item JSDQ were eliminated. Since hospitalized patients are not working and have generally been unemployed or out of school prior to their hospitalization, and since most patients are supported by disability or public assistance (Welfare, SSI) and not managing their own funds, it was deemed appropriate to eliminate the Work and Money scales. An additional scale of 10 items extracted from other Jourard Self-Disclosure Questionnaires was added. These items were of medium or high intimacy levels and dealt with Experiences and Relationships.

There is an established precedent for modifying the 60 item Jourard Self-Disclosure Questionnaire and adjusting it to the requirements of a particular study (Halverson & Shore, 1969). Since the original 60-item JSDQ was introduced, subsequent researchers have employed variations that differ on a number of dimensions including length of questionnaire, target persons, instructions, format and nature of grammatical phrasing of items. Despite these differences there has been a tacit assumption in the literature that the various measures are equivalent (Jourard, 1971; Pederson & Higbee, 1968).

Jourard and Lasakow (1958) studied the reliability of the 60-item JSDQ by administering it to 70 college students of both sexes. The questionnaire's 240 entries, 60 to each of 4 target persons, were divided into halves by odd-even

method and the subtotals correlated with each other. The resultant r corrected, was .94 indicating that subjects were responding consistently to the questionnaire over all target persons and aspects of self.

Pederson and Higbee (1968) obtained evidence for convergent and discriminant validity of the 10-item and 25-item JSDQ by means of multitrait multimethod matrices (Campbell & Fiske, 1959). The JSDQ appears to be independent of intelligence (Halverson & Shore, 1969; Jourard, 1961; Taylor, 1968) providing further evidence for discriminant validity of the JSDQ.

Jourard (1961b) reported that productivity on the Rorschach correlated .37 ($p < .05$) with total score on the JSDQ and interpreted this finding as supporting the construct validity of the instrument. Age trends in self-disclosure patterns also found by Jourard (1961a) can be viewed as evidence for concurrent and discriminant validity of the questionnaire.

Evidence for predictive validity is complex. The JSDQ scores reflect the subject's past history of disclosure and cannot appropriately be compared to actual disclosure in an experimental situation, to a stranger, or different target person than those specified. When the Jourard measure was used differentially to evaluate past disclosure and what the subject would be willing to disclose to a stranger, the questionnaire has been shown to predict actual disclosure

(Daher & Banikiotes, 1976; Jourard, 1961; Jourard & Resnick, 1970).

As regards validity of self-reported disclosure in the past, Shapiro and Swenson (1969) found a correlation between what one spouse claimed to know and what the other reported to have disclosed. More recently, Sobell (1975) found that a patient population of alcoholics were able to give valid self-disclosing reports.

This study is concerned with the schizophrenic's subjective perception of self in contrast to that of his sibling within the family structure. As such, the objective validity of the self-disclosure measure is not essential to an appraisal of the subject's experiential sense of himself in interaction with his parents. Though the study allows comparison between the offspring's reported self-disclosure and the parent's report of what has been disclosed there is no assumption made that either will accurately reflect fact. This study makes the assumption that differences may occur, especially with the schizophrenics, and that these are a variable worthy of study.

In addition to the self-disclosure questionnaire, all offsprings were asked to fill out a questionnaire rating, on a 5 point scale, each parent's character traits in terms of their degree of liking for that trait in the parent. The ratings ranged from 1— strong positive feelings to 5 — strong negative feelings, with 3 the neutral position.

Parents were similarly asked to rate their offsprings and their spouses. The questionnaire was published by Jourard (1971) and used to assess the relationship between self-disclosure and liking for the target person. Following Jourard, sum trait scores were computed for each subject's rating of the target persons.

CHAPTER III

RESULTS

The results of this study are considered in the order in which the hypotheses were enunciated. The first section reports on Hypotheses 1 through 5 tested by consideration of the sum disclosure scores on the modified Jourard Self-Disclosure Questionnaire (JSDQ) for all subject groups. Thereafter, the consequences of a factor analysis of the items that compose the self-disclosure scale are examined and related to Hypothesis 6. Results pertaining to reported satisfaction and misrepresentation in disclosure are considered next. Finally, the results pertaining to the effects of liking of family members for one another measured by the Trait Questionnaire are considered.

Sum Disclosure Scores

The first hypothesis was that schizophrenics would report higher self-disclosure to each parent than would their healthy (i.e. non-psychotic) sibling. By contrast to the control offsprings, however, it was expected that schizophrenics would be less disclosing. Siblings were expected to be the lowest disclosers of the three groups.

Paired comparisons of schizophrenic patients with their siblings were first assessed by within-family matched t-tests of sum self-disclosure scores. Since Jourard (1967, 1971) found that self-disclosure is affected by sex differences

and by the target parent to whom disclosures are made, an examination of results was made with subjects grouped by sex and disclosure to target parent.

As may be seen from the demographic data presented in Table 3, same-gender patient-sibling pairs numbered four male pairs, and three female pairs. Limitations in the degrees of freedom made significance difficult to obtain. The findings closest to significance but markedly short of that level was that female siblings disclosed more to their mothers (mean of 55.3) than did their schizophrenic sisters (mean of 39.7), $\underline{t}$ (2) = 2.14, ns. This finding was contrary to expectation. Paired comparisons of all patients with their siblings, not controlling for sex, yielded no significant results.

Parents' reports of disclosure by their offsprings was also examined using matched pair t-tests. It was found that fathers reported significantly more disclosure to them by male schizophrenics (mean 50.8) than their male siblings (mean 45.5), $\underline{t}$ (3) = 3.66, $\underline{p} < .05$, 2 tailed. No other significant differences were found.

The next statistical procedure involved contrasts between experimental (both patients and siblings) and control groups, without matching patients-siblings or control offsprings within the same family. As will be reported below, this procedure failed to confirm the significant (or near significant) findings in the aforementioned matched-pair

contrasts, though the trends were in the same direction. Therefore, findings from the very small sample of same-gender patient-sibling pairs may be unique to that family constellation or spurious.

Mean self-disclosure scores and standard deviations of patients, siblings, and controls (broken down by sex) to each parent are presented in Table 5. Inspection suggests that with the exception of female siblings self-disclosure to mother, the differences between patients, siblings, and control offsprings fall in the expected direction, that is to say siblings disclosed less than patients or controls (Figure 1).

T-tests were therefore, performed to test for differences in self-disclosure between patient, sibling and control groups. No significant differences were found between reported self-disclosure of patients and siblings. The major findings were in contrasts between siblings and controls. As predicted male siblings disclosed significantly less to their fathers than did male controls, t (28) = 1.83, p .05, one tailed; and similarly, male siblings disclosed significantly less to their mothers than did male controls, t (28) = 1.83, $p < .05$, 1 tailed. A trend approaching significance was noted for female siblings' disclosure to father which, as predicted, was less than female controls' disclosure to father, t (28) = 1.54, ns., but no such trend was found in female disclosures to mother. When the

Table 5

Means and Standard Deviations for Offsprings' Reported Self-Disclosure to Parents and Parents' Report of Offspring Disclosure to Them

		Patients		Siblings		Controls	
		Male	Female	Male	Female	Male	Female
Number of Cases		12	8	9	11	21	19
Offsprings' Self-Disclosure to Father	M	43.46	40.88	39.11	32.45	53.81	43.79
	SD	(18.17)	(19.90)	(17.16)	(16.49)	(21.18)	(20.92)
Offsprings' Self-Disclosure to Mother	M	46.42	48.25	43.56	53.27	55.81	57.42
	SD	(16.84)	(15.58)	(15.43)	(16.47)	(17.33)	(14.96)
Fathers' Report of Offspring Disclosure to Them	M	47.83	45.25	46.89	39.45	55.62	48.63
	SD	(21.95)	(17.14)	(25.59)	(18.82)	(22.82)	(19.40)
Mothers' Report of Offspring Disclosure to Them	M	49.00	62.50	53.67	55.27	54.52	56.89
	SD	(17.63)	(17.90)	(17.27)	(20.87)	(19.18)	(13.23)

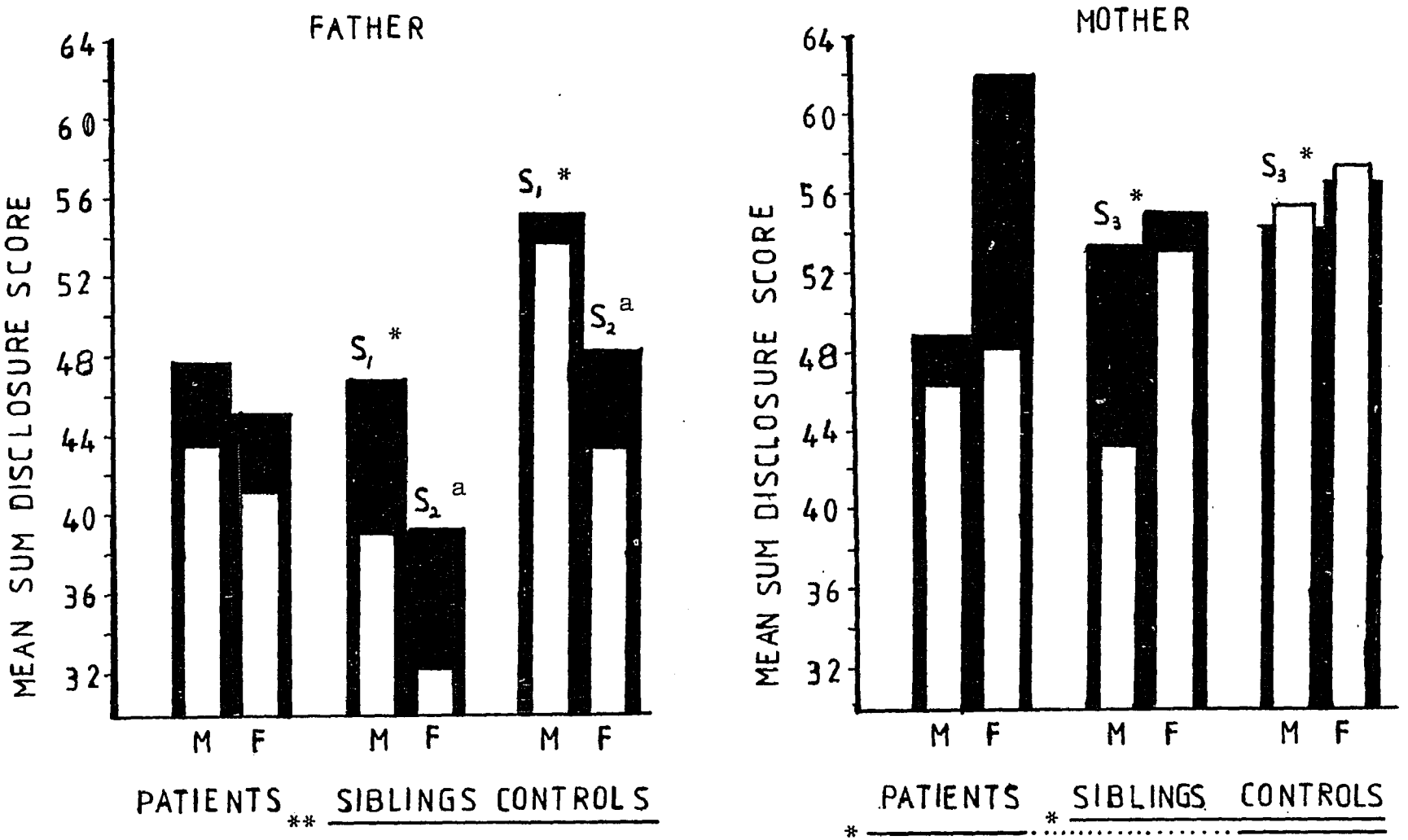

Figure 1. Mean sum disclosure to parents for the three groups broken down by sex. (Parents' reports indicated by black bar. Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. $p < .10$, * $p < .05$, ** $p < .01$)

siblings were compared to controls without differentiating sex, it was found that siblings disclosed significantly less to father than did controls, t (58) = 2.49, $p < .01$, 1 tailed, and likewise less to mother, t (58) = 1.73, $p < .05$, 1 tailed.

In examining the contrasts between patients and controls, the only significant finding was that as expected, patients disclosed less to their mothers than did the control group, t (58) = 2.15, $p < .05$, 2 tailed.

Since age is a demographic variable which may affect self-disclosure (Jourard, 1961a, 1964, 1971) it was deemed necessary to perform a correlational evaluation of self-disclosure scores to age in all offspring groups as well as all groups combined. No significant correlations were found. Therefore, it is assumed that the higher mean age of siblings over control groups (see Table 3) is probably not a confounding variable in the lower self-disclosure scores of the older group.

Parents' reports of the disclosure of their offsprings were also contrasted by t-tests of all comparable subgroups as well as the full patient, sibling and control groups. No significant differences were identified.

The design of this study allowed a comparison between offsprings' reported self-disclosure and the parents' reports of what had been disclosed to them. Hypothesis 2 predicted that parents' reports of disclosure by their off-

springs will not correlate with offsprings' self-reports in the schizophrenic and sibling groups. It also predicted a high correlation between parents' and offsprings' reports in control families.

Spearman Rank-Order Correlations between offsprings' reported self-disclosure and the complementary parental reports of offsprings' disclosure to them across all subgroups are presented in Table 6. There were significant correlations for the siblings-to-fathers groups, the sibling-to-mothers group and the combined siblings-to-parents groups. Significant correlations were also found in the male controls-to-mothers group, the female controls-to-mothers group and the combined controls-to-mothers group, the latter strong enough to bring to a significant level the combined controls-to-parents group. As a group the correlation of patients-parents report of disclosure did not reach significance, though the female patients-to-fathers and the male patients-to-mothers approached significant levels.

Several secondary hypotheses related to the expectation that the schizophrenic becomes bound up in an intense, emotionally ambivalent love-hate relationship with the opposite-gender parent. Hypothesis 3 predicted that schizophrenics would show greater disparity between disclosures to mother as compared to father than would the siblings orcontrols. Significant results were found in the contrast of patients to siblings which contradicted the hypothesis.

Table 6

Spearman Rank-Order Correlation of Offsprings' Reported Self-Disclosure to Parents with Parents' Report of Offspring Disclosure to Them

		Father	Mother	Parents
Male Patient	N=12	-.05	.54[a]	
Female Patient	N= 8	.68[a]	-.04	
Patients	N=20	.15	.37	.36
Male Siblings	N= 9	.50	.39	
Female Siblings	N=11	.58[a]	.55[a]	
Siblings	N=20	.55**	.48*	.53**
Male Controls	N=21	.13	.59**	
Female Controls	N=19	.13	.45*	
Controls	N=40	.15	.57***	.34*

a $p < .10$, 2 tailed (trend)

* $p < .05$, "

** $p < .01$, "

*** $p < .001$, "

Schizophrenics disclosed more equitable to each parent than did the siblings ($p < .05$) as may be seen in Table 7. A trend was also found to be the reverse of expectation for female schizophrenics as compared to female siblings, the former showing less disparity between disclosure to father and mother.

It was also found that for female siblings and controls there was significantly greater disclosure to mother over that of father ($p < .001$). This was not true for female schizophrenics (Table 8).

An interesting peripheral finding consistent with the literature, examines general sex differences in sex disclosure to mothers and fathers. As can be seen from Figure 1, in all subgroups males disclosed more to fathers than did females in the related group, and females disclosed more to mothers than did males in the related group. This finding was examined in various subject groups in order to test Hypothesis 4 and 5.

Hypothesis 4 proposes that schizophrenics' disclosure to the same-gender parents will be lower than the siblings disclosure to the same-gender parent, while conversely, Hypothesis 5 proposes that schizophrenics' disclosure to opposite-gender parent will be higher than the siblings' disclosure to the opposite-gender parent.

Regarding Hypothesis 4 and 5, patients disclosed significantly less to same-gender parents than did the controls,

Table 7

Contrasts in Disparity Scores Between Disclosure to Mother and Father for All Subject Groups

	N	M	SD	t	p
Patients to Siblings					
Combined	20 20	4.75 13.45	(11.58) (14.64)	2.08	<.05
Males	12 9	3. 4.44	(5.29) (8.41)	.48	
Females	8 11	7.38 20.82	(17.52) (14.76)	1.81	<.10
Patients to Controls					
Combined	20 40	4.75 7.5	(11.58) (12.7)	.81	
Males	12 21	3 1.95	(5.29) (11.02)	.31	
Females	8 19	7.38 13.63	(17.52) (11.78)	1.09	
Siblings to Controls					
Combined	20 40	13.45 7.5	(14.64) (12.7)	1.63	
Males	9 21	4.44 1.95	(8.41) (11.02)	.60	
Females	11 19	20.82 13.63	(14.76) (11.78)	1.47	

Table 8

Contrasts Between Mean Self-Disclosure to Father and Mother

	Males			Females		
	M	SD	t	M	SD	t
Patients						
Disclosure to Father	43.42	(18.17)	.96	40.88	(19.90)	1.19
Disclosure to Mother	46.42	(16.84)	df=11	48.25	(15.58)	df=7
Siblings						
Disclosure to Father	39.11	(17.16)	1.58	32.45	(16.49)	4.68***
Disclosure to Mother	43.56	(15.43)	df=8	53.27	(16.47)	df=10
Controls						
Disclosure to Father	53.81	(21.18)	.83	43.79	(20.92)	5.05***
Disclosure to Mother	55.81	(17.33)	df=20	57.42	(14.96)	df=18

*p .05
**p .01
***p .001

t (58) = 2.08, $p < .05$, 2 tailed; siblings disclosed less to opposite-gender parents than did controls, t (58) = 2.45, $p < .05$.

Factor Analysis of Self-Disclosure

Hypothesis 6 predicts that schizophrenics will report greater levels of self-disclosure in highly intimate topics than will siblings or controls. The siblings and controls are expected to report greater disclosure in the low intimacy topics. To assess this hypothesis, rather than deal with Jourard's five domains which presume a change in intimacy level every ten items, it was decided to perform a factor analysis on all offspring responses, and then presuming factors would be found, to determine their relative intimacy levels on a phenomenological basis.

A principal component factor analysis yielded a 13 factor solution accounting for 68% of the variance among the 50 items which were submitted to an orthogonal varimax solution. The complete factor loadings for this solution are presented in Appendix B. The salient loadings for each factor (r's $\geq$ .40) are shown in Tables 9 through 21, each labeled by the author to conform to the content of the individual items.

The thirteen factors, as presented in Table 9 through 21 with their title and individual items, were shown to three independent raters. They were asked to sort the factors by intimacy level using as guidelines established ratings for

Table 9

Significant Factor Loadings for Varimax Factor I

Major Areas of Concern

Item #		Rotated Factor Loading
50	Disappointment experienced with the opposite sex or with friends	.65
22	Feelings I have trouble expressing or controlling	.60
24	My sexual attractiveness	.55
23	My sex life including means of gratification	.54
21	Aspects of my personality I dislike or worry about	.53
46	Shortcomings and handicaps that prevent me from getting ahead	.50
41	The unhappiest moment of my life	.48
25	Things I feel ashamed and guilty about	.45
31	Feelings about my facial appearance	.43
49	Time I spend in reverie or fantasy	.40

Table 10

Significant Factor Loadings for Varimax Factor II

Interests and Tastes

Item #		Rotated Factor Loading
14	My favorite reading matter	.83
13	My likes and dislikes in music	.81
15	My favorite movies and T.V. shows	.58
16	My taste in clothing	.47

Table 11

Significant Factor Loadings for Varimax Factor III

Physical Appearance

Item #		Rotated Factor Loading
33	My feelings about parts of my body	.77
38	My efforts to keep fit, healthy, and attractive	.75
32	How I wish I looked	.63
34	Past problems or worries with my appearance	.60
39	My present physical measurements	.57
16	My taste in clothing	.45
31	Feelings about my facial appearance	.43

Table 12

Significant Factor Loadings for Varimax Factor IV

Physical Health and Resentments

Item#		Rotated Factor Loading
35	Present health problems, e.g. sleep, female complaints, heart condition, allergies, headaches, piles, etc.	.72
36	Long range worries about health, e.g. cancer, ulcers, heart trouble	.72
47	Persons in my life whom I most resent and why	.48
39	My present height and weight	.42

Table 13

Significant Factor Loadings for Varimax Factor V

Personal Morality

Item #		Rotated Factor Loading
1	My personal religious views	.78
6	My personal views on drinking and drugs	.58
7	My personal views on sexual morality	.51
2	My personal opinions about other religious groups	.46
26	The things that make me furious and how I react	.44

Table 14

Significant Factor Loadings for Varimax Factor VI

Negative Family Characteristics

Item #		Rotated Factor Loading
45	Characteristics of my father I don't like	.77
44	Characteristics of my mother I don't like	.66
43	Ways in which my family may be maladjusted	.54

Table 15

Significant Factor Loadings for Varimax Factor VII

Parental Dealings with Offsprings and their Environment

Item #		Rotated Factor Loading
10	How I think parents should deal with children	.61
17	The style of house and furnishings I like	.60
11	My taste in food	.56
12	My favorite beverages	.41

Table 16

Significant Factor Loadings for Varimax VIII

Opinions on Public Issues

Item #		Rotated Factor Loading
5	My views on racial integration	.77
3	My vies on communism	.71
4	My views on the present government and officials	.68
2	My personal opinion about other religious groups	.60

Table 17

Significant Factor Loadings for Varimax Factor IX

Positive (and Negative) Experiences

Item #		Rotated Factor Loading
19	My favorite way of spending spare time	.74
30	The things that make me proud and elated	.58
42	What I'm criticized and praised for and my reaction	.42

Table 18

Significant Factor Loadings for Varimax Factor X

Negative Affect and Experiences

Item #		Rotated Factor Loading
28	What makes me worried, anxious, and afraid	.73
27	What makes me depressed and blue	.67
29	What hurts my feelings deeply	.59
21	Aspects of my personality I dislike or worry about	.46
26	Things that make me furious and how I react	.44

Table 19

Significant Factor Loadings for Varimax Factor XI

Sexual Behavior

Item #		Rotated Factor Loading
40	Feelings about the adequacy of my sexual behavior	.76
23	My sex life including means of gratification	.57
18	The social gathering I like or dislike	.47
7	My personal views on sexual morality	.42

Table 20

Significant Factor Loadings for Varimax Factor XII

Admiration and Disappointment with Others

Item #		Rotated Factor Loading
8	What I consider attractive in women	.73
9	Things I regard as desireable for a man to be	.63
50	Disappointments experienced with the opposite sex or with friends	.41

Table 21

Significant Factor Loadings for Varimax Factor XIII

Problems of Functioning and Livelihood

Item #		Rotated Factor Loading
37	My past record of illness and treatment	.71
48	Difficulties I have with financial support	.57

items listed in several other published versions of the Self-Disclosure Questionnaire (Jourard, 1971). There was 100% rater agreement.

The following factors were judged as falling in the high intimacy domain:

I Major Areas of Concern

V Personal Morality

VI Negative Family Characteristics

X Negative Affect and Experience

XI Sexual Behavior

XIII Problems of Functioning and Livelihood

The following factors were judged of moderate or mixed intimacy:

III Physical Appearance

IV Physical Health and Resentment

IX Positive and Negative Experiences

XII Admiration and Disappointment with others

The following factors were judged to be of low intimacy:

II Interests and Tastes

VII Parental Dealings with Offsprings and their Environment

VIII Opinions on Public Issues

In the Jourard Self-Disclosure Questionnaire used in this study, items one through twenty on the scale were considered to be of low intimacy. It is interesting to note

that all the items identified with Factors II, VII, and VIII were within the one to twenty (low intimacy) portion of the Jourard scale.

Items 16, 19, 8 and 9 had loadings on moderate level Factors III, IX, and XII respectively. An interesting grouping of items 1, 2, 6 and 7 occurred in Factor VI, which for purposes of this study was rated at high intimacy level. This reflects the fact that these items, particularly item 6, which relates to drug use, are those which parents might probe for disclosure and be resisted by their offsprings. These items also drew the highest numbers of misrepresentations (lies) by offsprings and some parental expectation of misrepresentation by their offsprings. Item 7 also had significant loading on high intimacy Factor XI.

The impression was that the factor method was an improvement over Jourard's arbitrary assignment of item grouping.

Examination of Differences in Factor Scores. Mean factor scores of disclosure to father and to mother were computed for male, female and combined patient groups; for male, female and combined sibling groups; and for male, female and combined control groups. The means and standard deviations for each subject group are listed in Tables 22. to 27.

Appropriate t-test contrasts were computed and significant differences found within several of the factors as in-

Table 22

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Father

Patients

Disclosure to Father			Male N=12	Female N=8	Combined N=20
Factor	I	M	.07	.25	.14
		SD	(.89)	(1.38)	(1.08)
	II	M	-.17	-.82	-.43
		SD	(1.22)	(.96)	(1.15)
	III	M	-.18	-.26	-.21
		SD	(1.15)	(.78)	(1.00)
	IV	M	.03	-.03	.01
		SD	(.71)	(1.10)	(.86)
	V	M	.06	-.60	-.20
		SD	(.65)	(.84)	(.78)
	VI	M	- 25	.44	.02
		SD	(1.04)	(1.10)	(1.09)
	VII	M	-.82	-.75	-.79
		SD	(.91)	(.70)	(.81)
	VIII	M	-.10	-.50	-.26
		SD	(.76)	(.74)	(.76)
	IX	M	.03	-.09	-.02
		SD	(.89)	(.52)	(.75)
	X	M	.56	.31	.46
		SD	(.80)	(.49)	(.69)
	XI	M	-.04	.75	.27
		SD	(.95)	(1.79)	(1.36)
	XII	M	- 17	.19	-.03
		SD	(.93)	(.78)	(.87)
	XIII	M	.15	.02	-.08
		SD	(.70)	(1.19)	(.90)

Note. Means expressed in factor scores.

Table 23

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Father

Siblings

Disclosure to Father			Male N=9	Female N=11	Combined N=20
Factor	I	M	-.36	.38	-.37
		SD	(.87)	(59)	(.71)
	II	M	.36	-.46	-.09
		SD	(1.11)	(.79)	(1.01)
	III	M	-.62	-.89	-.77
		SD	(1.00)	(.67)	(.82)
	IV	M	.10	-.40	-.17
		SD	(1.44)	(.76)	(1.11)
	V	M	.25	-.46	-.14
		SD	(.85)	(1.14)	(1.05)
	VI	M	.60	-.16	.18
		SD	(.66)	(.65)	(.74)
	VII	M	.22	.52	.19
		SD	(.91)	(.97)	(.99)
	VIII	M	-.08	-.19	-.14
		SD	(1.35)	(.89)	(1.09)
	IX	M	.27	-.27	-.03
		SD	(1.16)	(.93)	(1.05)
	X	M	-.71	-.07	-.36
		SD	(.62)	(1.01)	(.90)
	XI	M	-.20	-.33	-.27
		SD	(.69)	(.59)	(.62)
	XII	M	-.71	-.03	-.34
		SD	(.70)	(.99)	(.92)
	XIII	M	.37	.27	-.02
		SD	(1.51)	(1.15)	(1.33)

Note. Means expressed in factor scores.

Table 24

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Father

Controls

Disclosure to Father			Male N=21	Female N=19	Combined N=40
Factor	I	M	.15	-.20	-.02
		SD	(1.18)	(.85)	(1.04)
	II	M	.28	-.39	-.04
		SD	(.78)	(1.28)	(1.09)
	III	M	.00	-.04	-.02
		SD	(1.08)	(.95)	(1.01)
	IV	M	-.17	.13	-.03
		SD	(1.17)	(.92)	(1.06)
	V	M	.29	-.42	-.05
		SD	(1.09)	(1.13)	(1.15)
	VI	M	-.26	-.21	-.24
		SD	(.94)	(1.11)	(1.01)
	VII	M	-.19	.01	-.10
		SD	(1.00)	(.78)	(.90)
	VIII	M	.67	.37	.53
		SD	(.68)	(.99)	(.84)
	IX	M	.11	.13	.12
		SD	(.61)	(1.32)	(1.00)
	X	M	.08	.05	.07
		SD	(.83)	(.97)	(.89)
	XI	M	.17	-.29	-.05
		SD	(.91)	(.80)	(.88)
	XII	M	-.05	28	.11
		SD	(1.28)	(.91)	(1.19)
	XIII	M	.14	-.21	-.03
		SD	(1.07)	(.99)	(1.03)

Note. Means expressed in factor scores.

Table 25

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Mother

Patients

Disclosure to Mother			Male N=12	Female N=8	Combined N=40
Factor	I	M	-.05	1.03	.38
		SD	(1.13)	(1.12)	(1.22)
	II	M	.24	.16	.21
		SD	(.88)	(.75)	(.81)
	III	M	-.33	.10	-.16
		SD	(.78)	(.56)	(.72)
	IV	M	.17	-.19	.02
		SD	(.69)	(1.00)	(.82)
	V	M	.00	.08	.03
		SD	(.83)	(.69)	(.76)
	VI	M	.07	-.35	-.10
		SD	(1.09)	(.96)	(1.03)
	VII	M	-.45	-.51	- 47
		SD	(.97)	(.53)	(.81)
	VIII	M	-.12	-.78	-.38
		SD	(.63)	(1.13)	(.90)
	IX	M	-.18	-.57	-.33
		SD	(1.03)	(.96)	(1.00)
	X	M	.34	.17	.27
		SD	(.75)	(.76)	(.74)
	XI	M	-.08	.35	.09
		SD	(.80)	(1.09)	(.92)
	XII	M	-.04	.03	-.01
		SD	(.76)	(.68)	(.71)
	XIII	M	.01	.00	.01
		SD	(.87)	(.82)	(.83)

Note. Means expressed in factor scores.

Table 26

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Mother

Siblings

Disclosure to Mother			Male N=9	Female N=11	Combined N=20
Factor	I	M	-.32	-.40	-.36
		SD	(.85)	(1.05)	(.94)
	II	M	.44	.03	.21
		SD	(.94)	(.80)	(.87)
	III	M	-.03	.69	.37
		SD	(1.00)	(.93)	(1.01)
	IV	M	.07	.07	.07
		SD	(1.65)	(.78)	(1.21)
	V	M	.15	-.39	-.15
		SD	(1.06)	(.85)	(.96)
	VI	M	.71	.13	.39
		SD	(.95)	(.89)	(.94)
	VII	M	-.23	.78	.33
		SD	(.68)	(.94)	(.96)
	VIII	M	-.41	-.20	-.29
		SD	(1.62)	(.94)	(1.26)
	IX	M	.28	-.69	-.25
		SD	(1.22)	(.58)	(1.02)
	X	M	-1.04	.18	-.37
		SD	(.72)	(1.25)	(1.10)
	XI	M	.06	-.04	.01
		SD	(.73)	(.52)	(.61)
	XII	M	-.64	.55	.01
		SD	(.74)	(.85)	(.99)
	XIII	M	-.15	.28	.09
		SD	(1.14)	(.88)	(1.00)

Note. Means expressed in factor scores.

Table 27

Means and Standard Deviations for Offsprings' Report of Self-Disclosure to Mother

Controls

Disclosure to Mother			Males N=21	Females N=19	Combined N=40
Factor	I	M	.27	-.04	.13
		SD	(.92)	(.86)	(.89)
	II	M	.19	-.03	.08
		SD	(.98)	(.95)	(.96)
	III	M	.17	.66	.40
		SD	(1.00)	(.89)	(.97)
	IV	M	.19	-.07	.07
		SD	(.89)	(1.04)	(.96)
	V	M	.30	.25	.28
		SD	(1.09)	(.99)	(1.03)
	VI	M	-.01	-.02	-.01
		SD	(1.19)	(.90)	(1.05)
	VII	M	.24	.72	.47
		SD	(.95)	(.98)	(.98)
	VIII	M	.34	-.35	.01
		SD	(.80)	(.98)	(.95)
	IX	M	.47	-.10	.20
		SD	(.93)	(1.15)	(1.06)
	X	M	-.34	.23	-.07
		SD	(1.14)	(1.19)	(1.19)
	XI	M	-.06	.05	.01
		SD	(.91)	(1.55)	(1.24)
	XII	M	-.29	.47	.07
		SD	(.93)	(1.19)	(1.12)
	XIII	M	.09	-.03	.03
		SD	(.85)	(1.10)	(.97)

Note. Means expressed in factor scores.

dicated in Tables 28 and 29.

High intimacy factors. The high intimacy factors were examined first. It was predicted by Hypothesis 6 that patients would report greater levels of self-disclosure on high intimacy topics than would siblings or controls.

On Factor I, Major Areas of Concern (Figure 2), female patients were significantly higher disclosers to their mothers their either the female siblings, t (17) = 2.86, $p < .05$ or the female controls, t (28) = 2.69, $p < .05$. Trends also indicated that siblings (sexes pooled) were less self-disclosing to mother than were controls. Siblings (sexes pooled) were less self-disclosing to fathers than were patients. All the above results met the expectation of Hypothesis 6.

On Factor VI, Negative Family Characteristics (Figure 3), the major findings related to fathers, who were disclosed to significantly more by male siblings than male patients, t (19) = 2.15, $p < .05$. The male siblings likewise disclosed significantly more to their fathers than did the controls, t (28) = 2.46, $p < .01$. These results were in direct contradiction to the expectations of Hypothesis 6.

On Factor X, Negative Affect and Experience (Figure 4), male patients disclosed significantly more than did male siblings to both fathers, t (19) = 3.96, $p < .001$, and mothers, t (19) = 4.23, $p < .001$. Significantly higher overall patient disclosure than sibling disclosure to each parent

Table 28

Factor Score Contrasts for Disclosure to Father

	Patient to Sibling			Patient to Control			Sibling to Control		
Factor	Male df=19	Female df=17	Combined df=38	Male df=31	Female df=25	Combined df=58	Male df=28	Female df=28	Combined df=58
I	1.13	1.21	1.78[a]	.20	1.05	.56	1.17	.60	1.37
II	1.01	.91	.99	1.29	.85	1.29	.22	.16	.18
III	.92	1.87[a]	1.92[a]	.44	.59	.70	1.47	2.60*	2.87**
IV	.15	.85	.56	.53	.39	.11	.53	1.59	.49
V	.59	.30	.22	.66	.41	.55	.09	.09	.30
VI	2.15*	1.48	.54	.01	1.39	.91	2.46**	.16	1.64
VII	1.49	3.12**	3.40**	1.79[a]	2.37 *	2.91**	.07	1.58	1.11
VIII	.04	.80	.40	3.00**	2.24*	3.53***	2.05*	1.56	2.64 *
IX	.54	.50	.04	.29	.45	.54	.51	.89	.52
X	3.96***	.97	3.24 **	1.61	.69	1.72[a]	2.56*	.33	1.75
XI	.41	1.87[a]	1.62	.64	2.11*	1.10	1.08	.13	1.00
XII	1.46	.53	1.10	.30	.26	.49	1.46	.90	1.56
XIII	.45	.45	.17	.83	.52	.21	1.06	1.20	.02

Note. Contrasts expressed in t values.

[a] $p < .10$ 2 tailed (trend)
* $p < .05$ "
** $p < .01$ "
*** $p < .001$ "

Table 29

Factor Score Contrasts for Disclosure to Mother

	Patient to Sibling			Patient to Control			Sibling to Control		
Factor	Male df=19	Female df=17	Combined df=38	Male df=31	Female df=25	Combined df=58	Male df=28	Female df=28	Combined df=58
I	.58	2.86*	2.15*	.90	2.69*	.91	1.63	1.04	1.97[a]
II	.49	.37	.01	.16	.51	.51	.65	.17	.51
III	.77	1.58	1.89[a]	1.51[a]	1.63	2.30*	.52	.09	.15
IV	.20	.65	.13	.07	.30	.18	.28	.37	.01
V	.36	1.29	.65	.85	.43	.95	.37	1.78	1.54
VI	1.42	1.11	1.57	.19	.84	.29	1.61	.43	1.46
VII	.58	3.48**	2.85**	1.99[a]	3.33**	3.71***	1.33	.16	.53
VIII	.59	1.23	.26	1.71[a]	1.00	1.55	1.74[a]	.43	1.06
IX	.93	.33	.26	1.85[a]	1.01	1.86[a]	.46	1.57	1.56
X	4.23***	.01	2.04*	1.83[a]	.12	1.18	1.69	.11	.92
XI	.41	1.03	.34	.07	.48	.31	.34	.19	.04
XII	1.79[a]	1.41	.10	.78	.98	.31	.98	.17	.20
XIII	.37	.70	.27	.25	.06	.10	.63	.79	.20

Note. Contrasts expressed in t values.

a $p < .10$ 2 tailed (trend)
* $p < .05$ "
** $p < .01$ "
*** $p < .001$ "

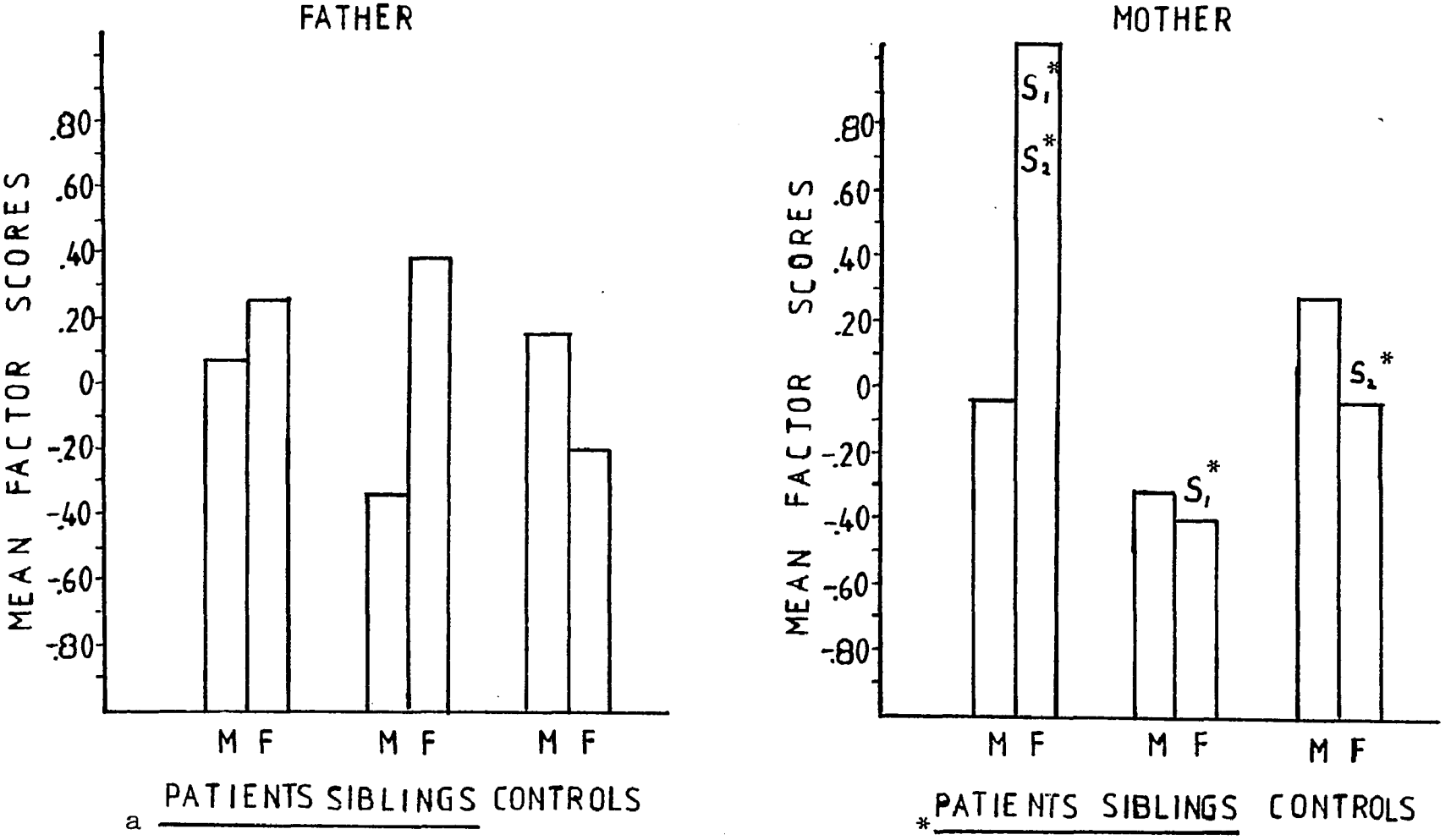

Figure 2. Factor I- Major Areas of Concern. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicate by S in or above bar. [a] $p < .10$, * $p < .05$)

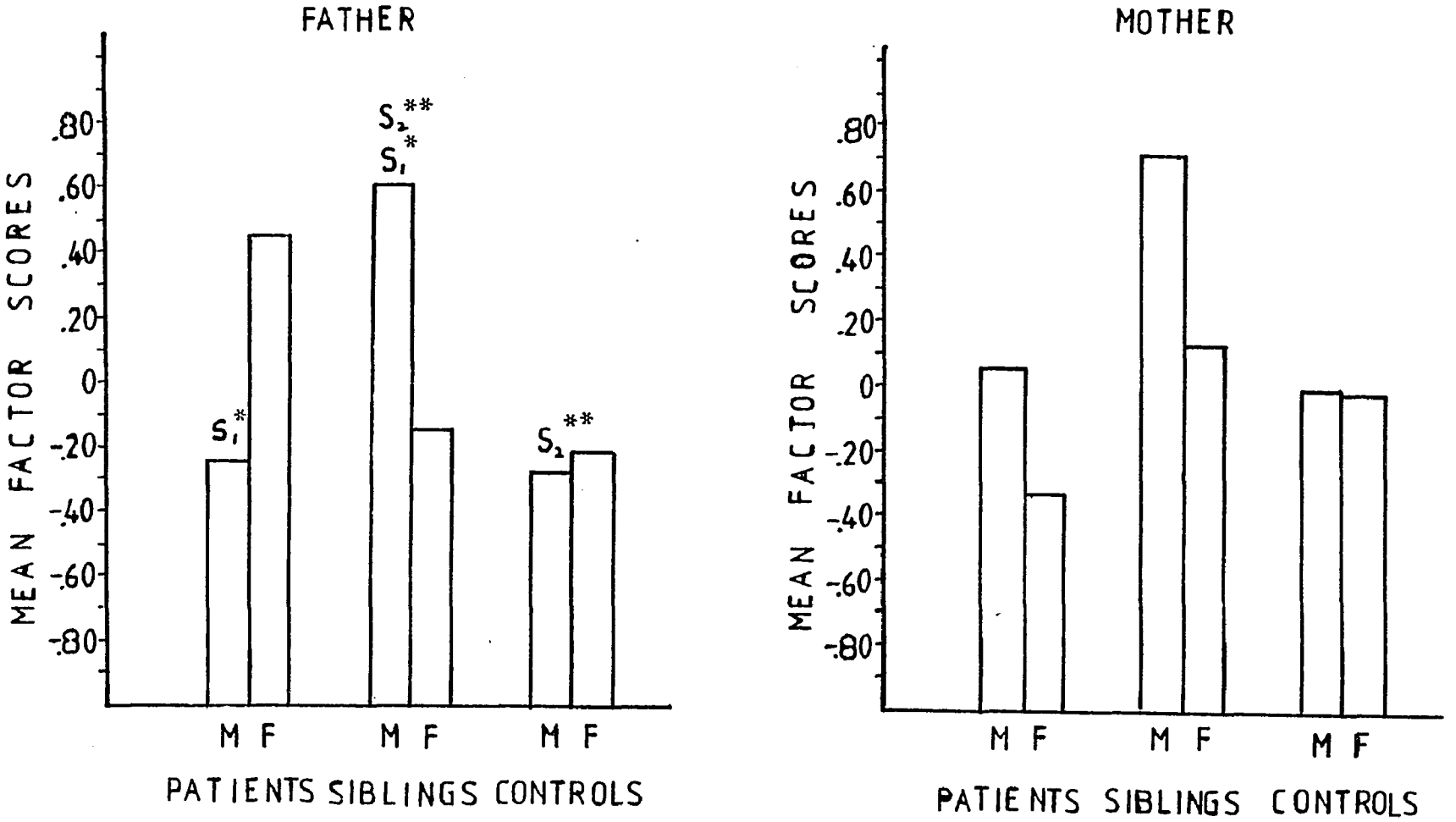

Figure 3. Factor VI- Negative Family Characteristics. Mean factor scores for patients siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. * $p < .05$, ** $p < .01$)

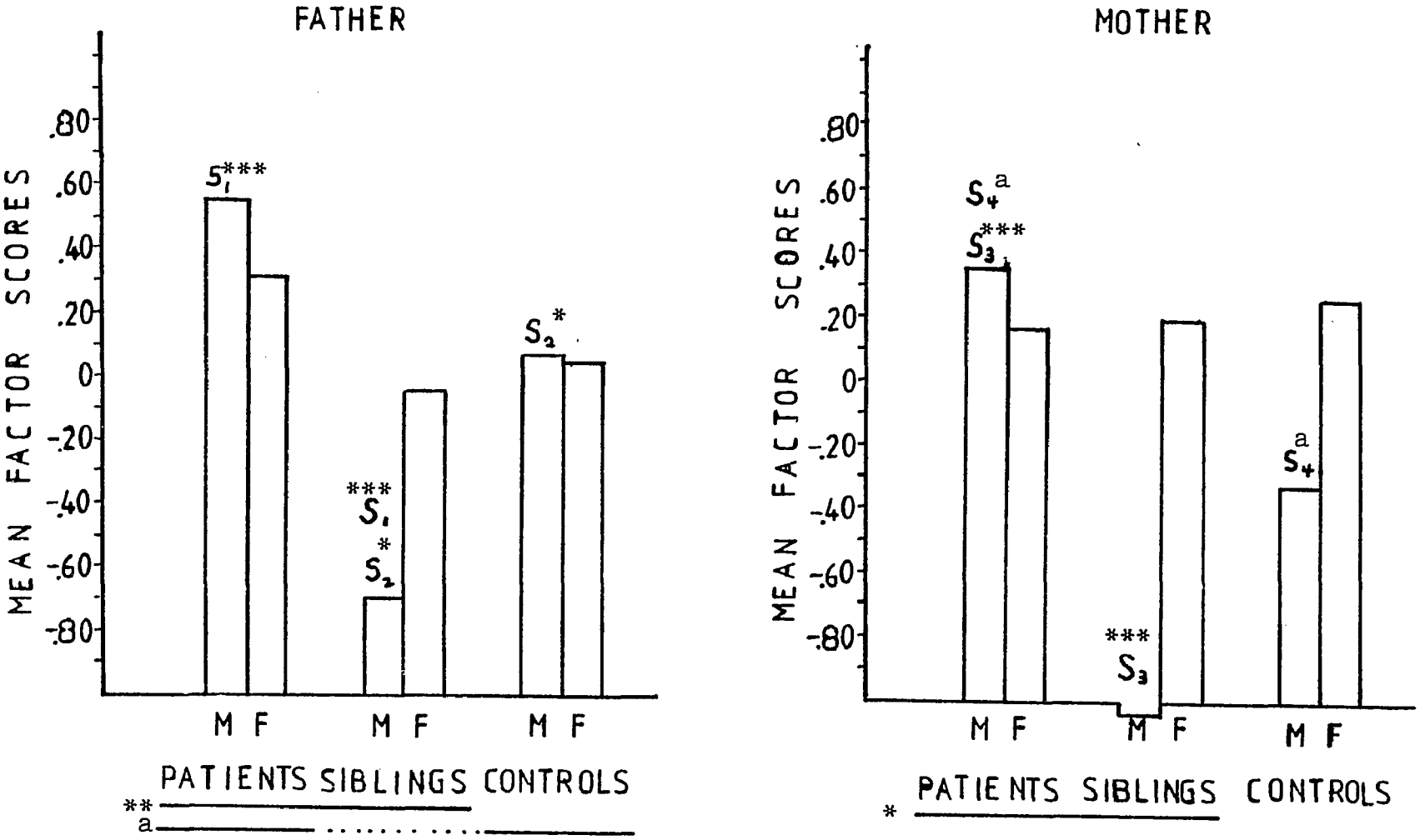

Figure 4. Factor X- Negative Affect and Experience. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. ^{a} $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$)

was probably due to the pull of strong differences within the male subgroups. A trend indicated that male patients were also more self-disclosing than male controls, t (31) = 1.83, $p < .10$, but only to mother. Male controls were more self-disclosing to father than were male siblings, t (28) = 2.56, $p < .05$. However, their mean disclosure scores did not approach that of the patients. These results supported Hypothesis 6.

An interesting finding on Factor XI, Sexual Behavior (Figure 5), was that female patients appeared to disclose more to their fathers than did female siblings, t (17) = 1.87, $p < .10$. Although only a trend, it became more convincing when it was found the female patients also disclosed significantly more to their fathers regarding their sexual behavior than did female controls, t (25) = 2.11, $p < .05$, again consistent with the prediction of Hypothesis 6.

Summarizing the results thus far, contrasts on three of the four highly intimate factors supported the prediction that schizophrenics would disclose more on high intimacy topics than either siblings or controls. Factor I, which related to problems in personality, sexuality, personal handicaps and guilt, and Factor XI, which related to sexual gratification and views on sexual morality proved highly discriminating between female subgroups. The former factor primarily differentiated disclosures to mothers, while the latter factor differentiated disclosures to fathers. Male

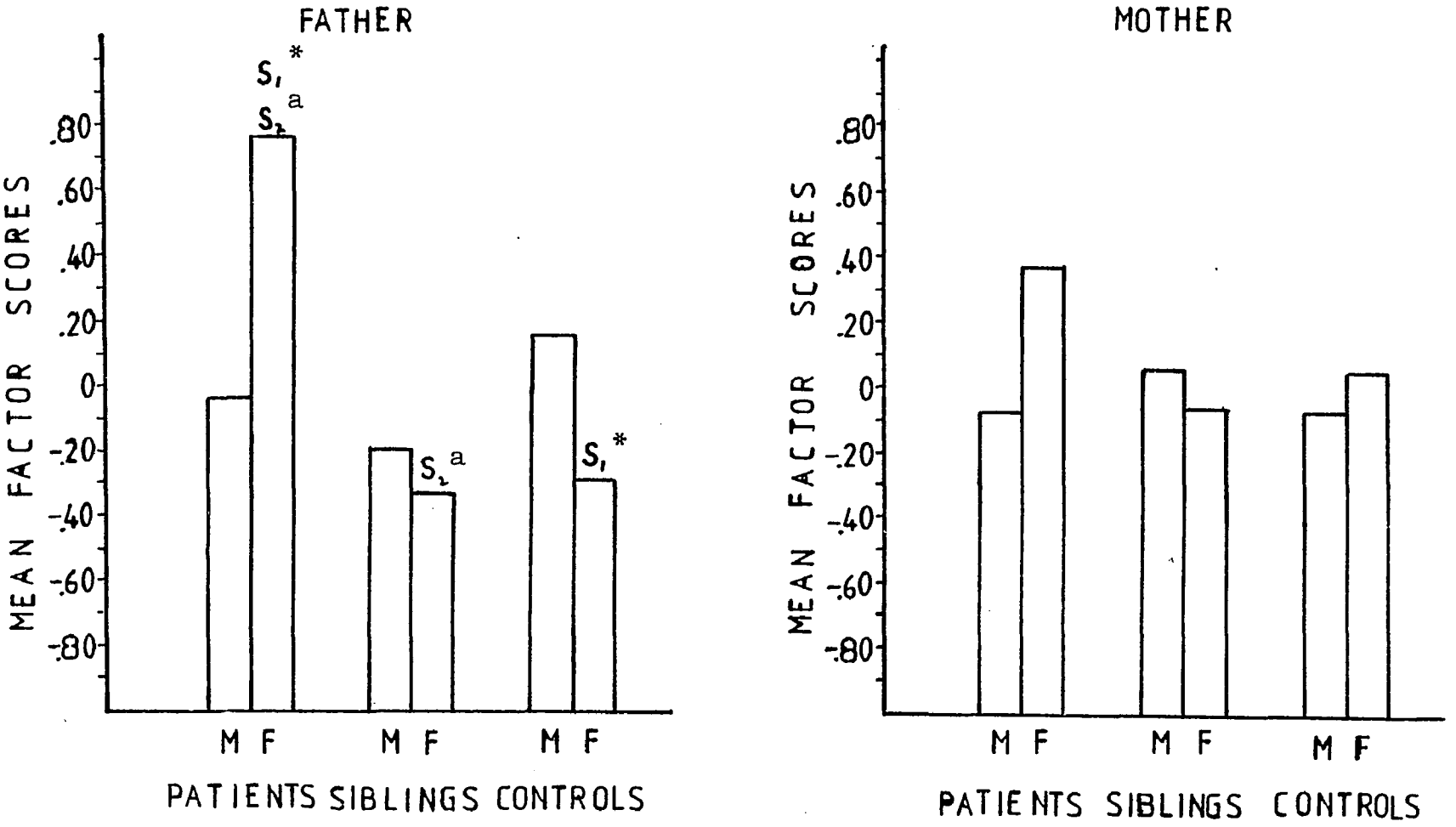

Figure 5. Factor XI- Sexual Behavior. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. [a] $p < .10$, * $p < .05$)

subgroups' disclosures to both mother and father were effectively discriminated by Factor X. On this factor, which dealt with negative affect including causes of anxiety, depression, and anger, male patients, as expected were the high disclosers to both mother and father. Male siblings were lower disclosers to father than were male controls.

Thus far it can be seen that in general, the patient is the most self-disclosing on intimate topics both to father and mother, the sibling least disclosing with the controls falling in the middle range. The exception was on Factor VI, negative family characteristics including those of father, mother and family maladjustment in general. Male siblings were significantly higher disclosers to father when compared with either male patient or control groups. The complexity of interaction between sex of the discloser, the target person and nature of the topic being disclosed suggests that composite statements of the results do not do justice to the data. Attention is particularly called to the one instance in which the patients self-disclosure was less than the siblings, i.e. Factor VI, Negative Family Characteristics. These issues will be delineated further in the Discussion section.

Low intimacy factors. Hypothesis 6 predicted that on topics of low intimacy, schizophrenics will report less self-disclosure than either siblings or controls.

Factor VII, Parental Dealings with Offsprings and Their

Environment (Figure 6) yielded a number of highly significant differences all of which added confirmation to Hypothesis 6. Patients disclosed significantly less than did siblings to their fathers, $\underline{t}$ (38) = 3.40, $\underline{p} < .01$ and mothers, $\underline{t}$ (38) = 2.85, $\underline{p} < .01$. This finding was true for female subgroups as well, $\underline{t}$ (17) = 3.12, $\underline{p} < .01$; $\underline{t}$ (17) = 3.48, $\underline{p} < .01$. Similarly, patients disclosed significantly less than did controls to their fathers $\underline{t}$ (58) = 2.90, $\underline{p} < .001$, and mothers $\underline{t}$ (58) = 3.71, $\underline{p} < .001$. These results were also noted in male subgroups as a trend and reached significance for the females, $\underline{t}$ (25) = 2.37, $\underline{p} < .01$; $\underline{t}$ (25) = 3.33, $\underline{p} < .01$.

Factor VIII, Opinions on Public Issues (Figure 7), also evoked consistently lower self-disclosure by patients as compared to controls, but only to the father, $\underline{t}$ (58) = 3.53, $\underline{p} < .001$. This relationship obtained in the male and female subgroups as well, $\underline{t}$ (31) = 3.00, $\underline{p} < .01$, $\underline{t}$ (25) = 2.24, $\underline{p} < .05$. The more interesting contrasts, however, were found in the siblings lower disclosure to father than controls' disclosed, $\underline{t}$ (58) = 2.64, $\underline{p} < .05$. Significance held for the male subgroup, $\underline{t}$ (28) = 2.05, $\underline{p} < .05$, though not for the females.

Summarizing the findings on low intimacy factors, it was found that, as expected, patients were in general lower disclosers to both father and mother compared to siblings or controls.

Factor VII parental dealings with offsprings, primarily

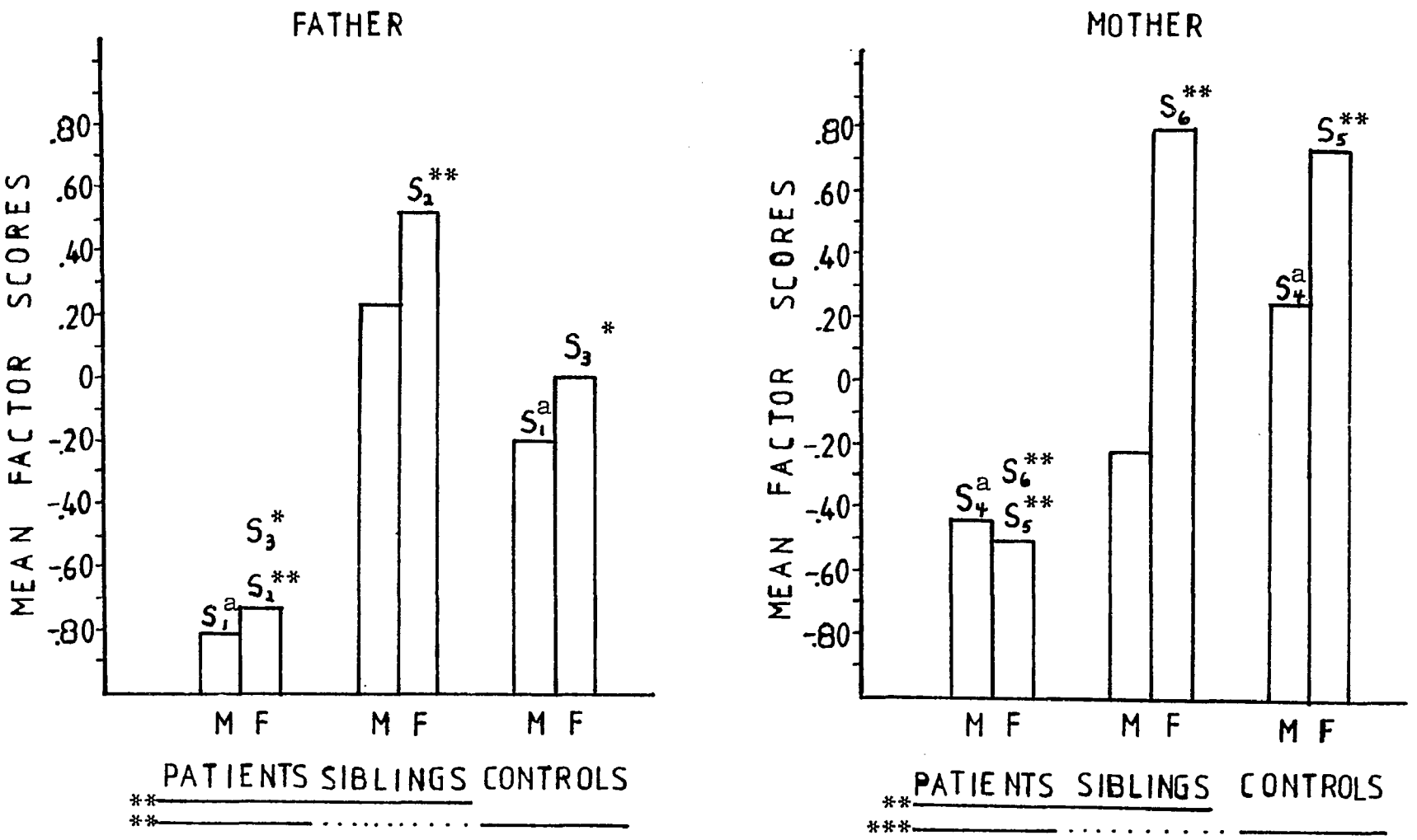

Figure 6. Factor VII- Parental Dealings with Offsprings and Their Environment. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. $^{a}p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$)

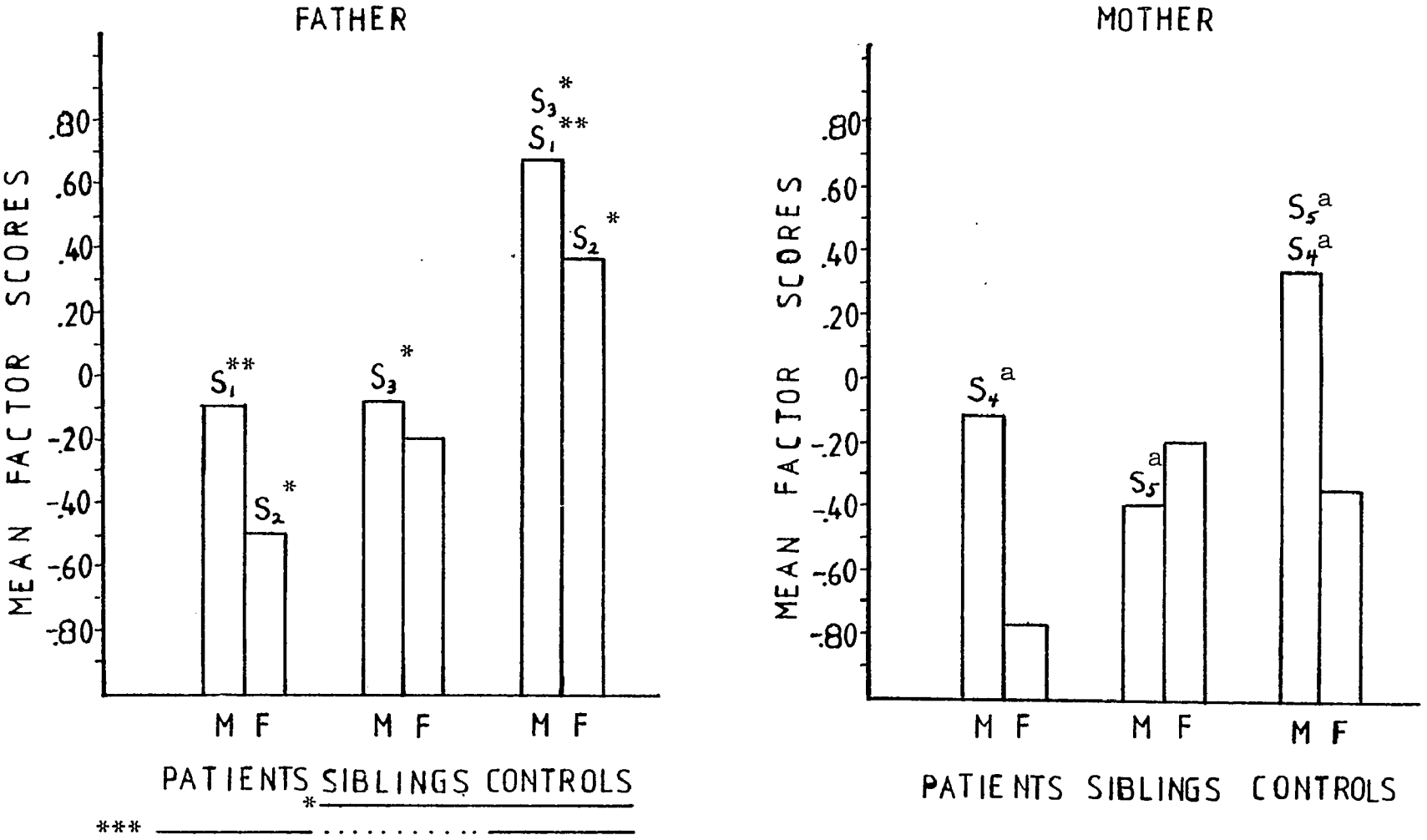

Figure 7. Factor VIII- Opinions on Public Issues. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. ^{a} $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$)

in relation to home, and meals, found patients reporting significantly less disclosure to fathers and mothers than did siblings or controls. These findings were significant as well for female subgroups but only approached significance for male groups.

On Factor VIII public issues of a political and social nature, patients were again the low disclosers to fathers when compared with controls, each sex individually and merged. To mothers only a trend, with male patients lower disclosers than controls was found, as was a trend for male siblings to be higher disclosers to mother than male patients.

The surprising finding was that, like the patients, siblings were lower disclosers to father than were controls. This was contrary to expectation.

The permutations of sex, target and topic again, as with the high intimacy disclosure patterns, raised interesting questions to be dealt with in the Discussion section.

Moderate intimacy factors. There were no specific predictions made with respect to these factors.

On Factor III, Physical Appearance (Figure 8), it was found that siblings disclosed significantly less to father than did controls, t (58) = 2.87, $p < .01$. The finding held for the female subgroup as well, t (28) = 2.60, $p < .05$. When patients were contrasted with controls they disclosed less to mother than did the latter, t (58) = 2.30, $p < .05$. When patients were contrasted with controls they disclosed

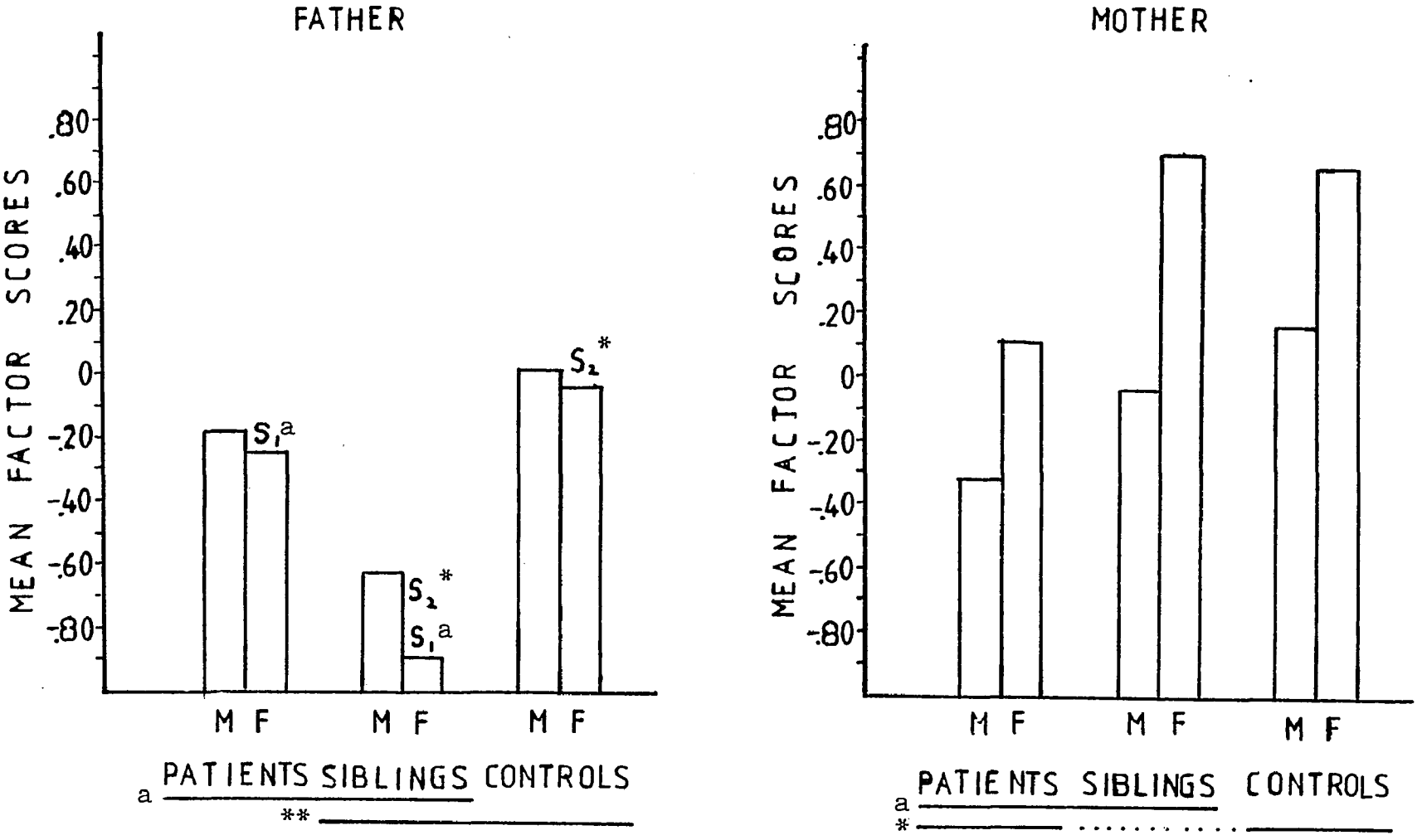

Figure 8. Factor III-Physical Appearance. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. ^{a} $p < .10$, * $p < .05$, ** $p < .01$)

less to mother than did the latter, t (58) = 2.30, $p < .05$. Trends were noted in the patient to sibling contrasts; patients tend to disclose more to fathers, t (38) = 1.92, $p < .10$, but less to mothers (t (38) = 1.89, $p < .10$) than do siblings. This trend was also found within the female subgroup which disclosed more to fathers than did female siblings, t (17) = 1.87, $p < .10$.

The other factors of moderate intimacy level yielded a few trends worth noting in relation to mother. In Factor IX, Positive and Negative Experiences (Figure 9), male patients tended to disclose more to mothers than did male controls. On Factor XII, Admiration for and Disappointments with Others (Figure 10), male patients tended to disclose less to their mothers than did male siblings.

Moderately intimate factors varied in terms of the groups which were the lowest and highest disclosers. In Factor III which dealt with physical appearance including feelings worries and ideals about face, body, and fitness, the siblings were indeed less disclosing to father than controls or patients. This held for the female subgroups as well. As regards mother, however, the patients were less disclosing than either siblings or controls. Other moderately intimate factors produced variable and minor trends.

Merging of factors by intimacy level. In an effort to achieve greater parsimony, the proceding factor scores were averaged over the three intimacy domains, (High, Moderate,

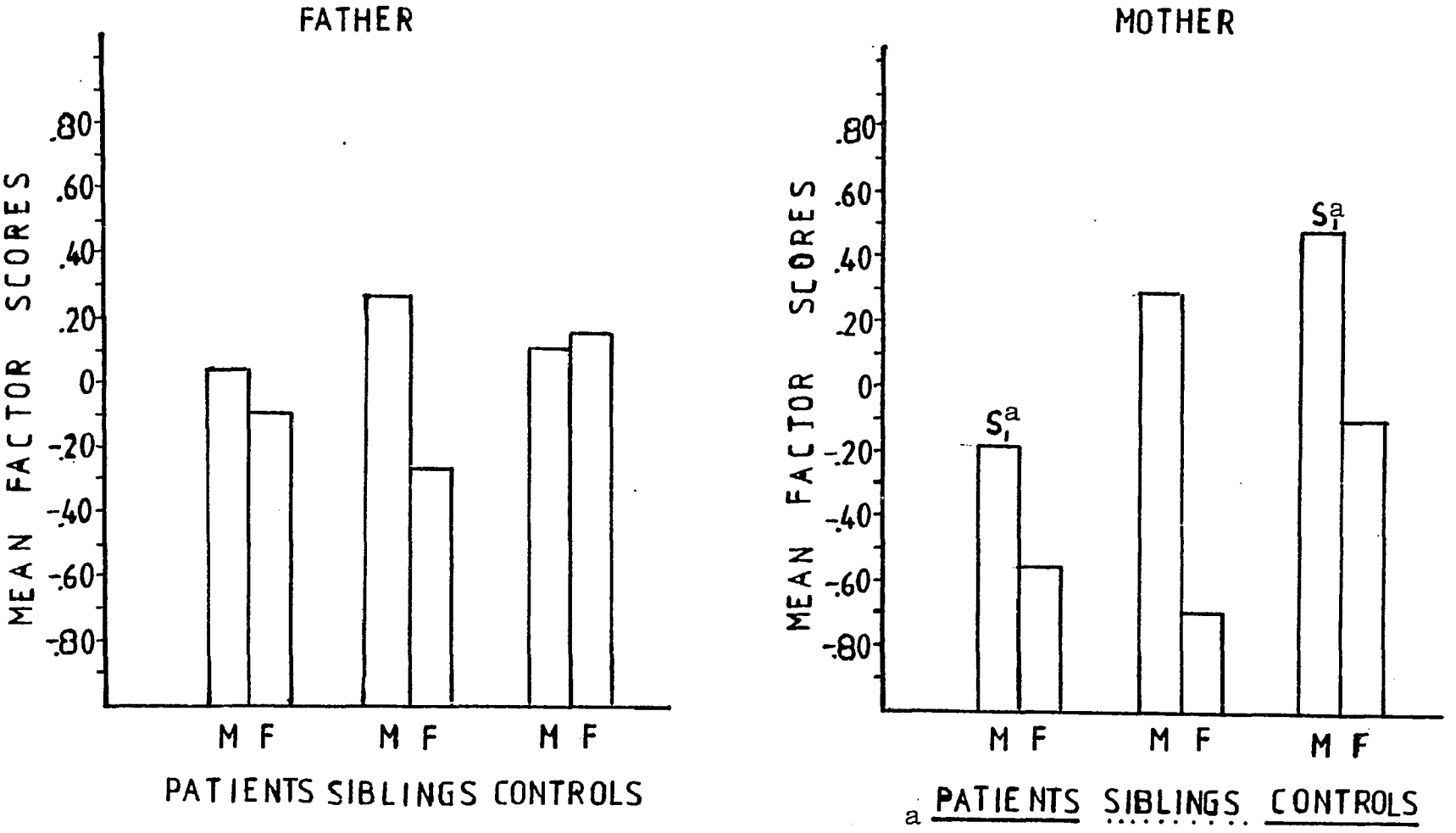

Figure 9. Factor IX- Positive and Negative Experiences. Mean factor scores for patients, siblings and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. $^a p < .10$)

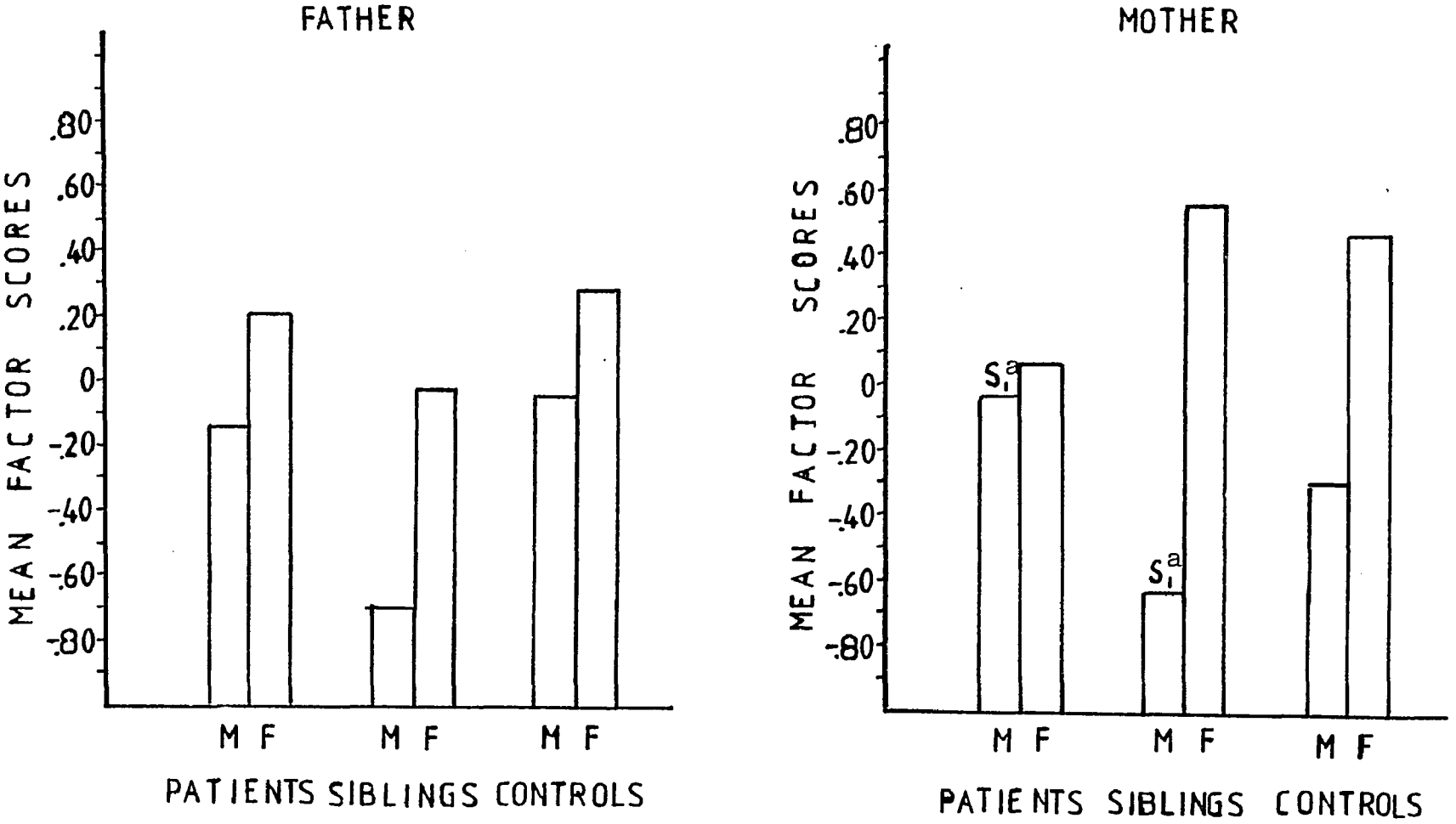

Figure 10. Factor XII- Admiration for and Disappointment with Others. Mean factor scores for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. [a] $p < .10$)

Low). The resulting three means obtained for each subject group were then contrasted to determine whether there were more meaningful differences to be found by this procedure.

The collapsing of the data by this method tended to obscure the relationships found by examination of separate factors, with one important exception, which may be seen in Figure 11. Female patients' disclosure of high intimacy topics to father, contrasted with female sibling and control groups reached significance. As suggested by findings on Factor XI, Sexual Behavior, previously reported, female patients disclosed more to their fathers on intimate topics than did the female siblings, t (17) = 2.29, $p < .05$ or the female controls, t (25) = 2.54, $p < .05$.

Satisfaction and Misrepresentation

Hypothesis 7 stated that schizophrenics would report more personal and parental dissatisfaction with their level of self-disclosure than would the siblings or controls. Mean satisfaction scores were computed for each offspring group and for the parental report on each of those groups and contrasts were made by t-test. No significant differences were found between patients', siblings' or controls' report of self or parental satisfaction.

A surprising finding was that mothers reported significantly more satisfaction with the patients' level of self-disclosure than did control mothers regarding their offsprings, t (58) = 2.00, $p < .05$, 2 tailed.

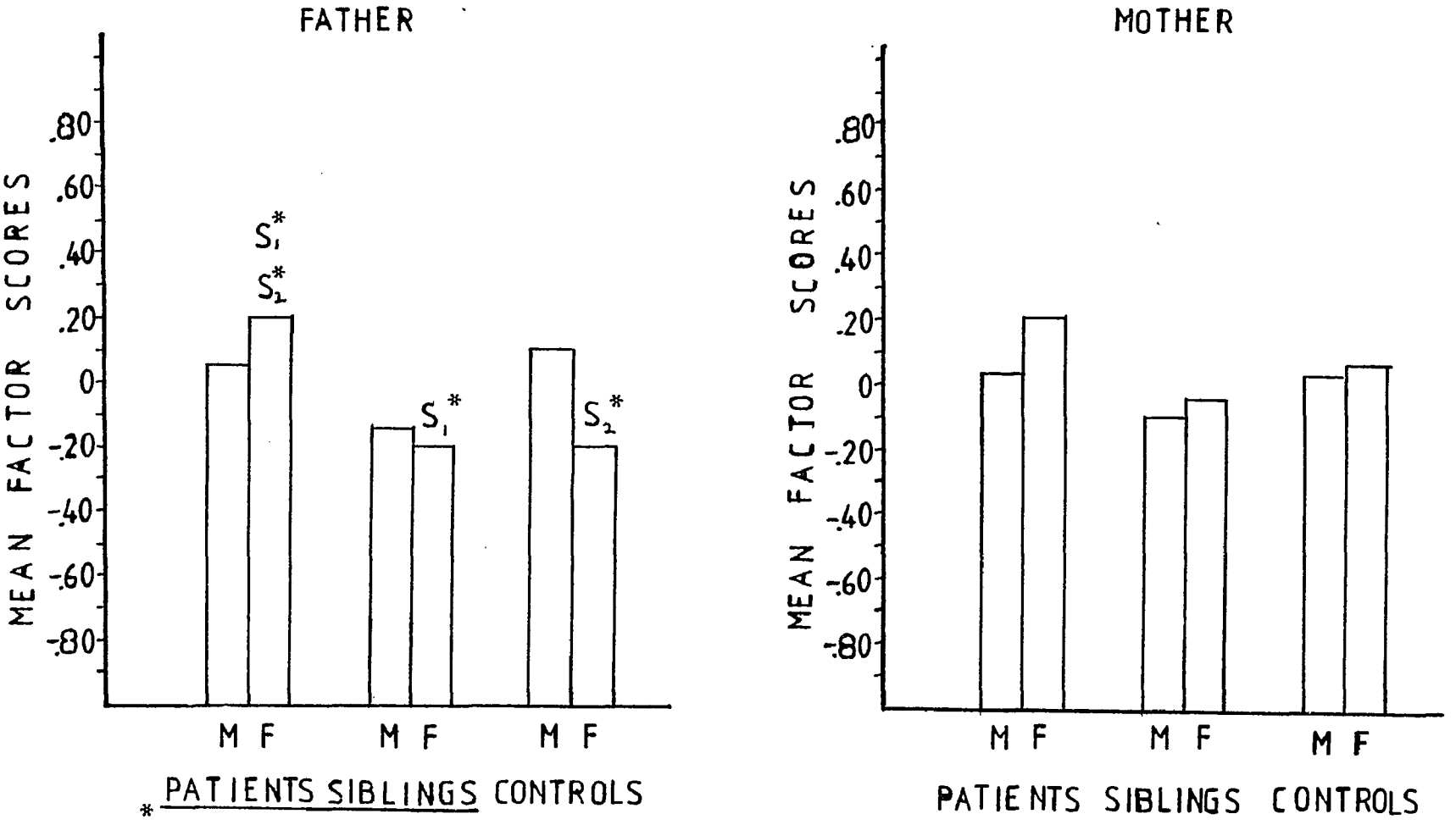

Figure 11. Combined high intimacy factor score means for patients, siblings, and controls broken down by sex. (Significant group contrasts indicated by underscoring. Significant subgroup contrasts indicated by S above bar. * $p < .05$)

In examining the correlation between offspring report of parental satisfaction and parental reports of self satisfaction, no significant relationships were found and no discrimination on this variable could be made between groups. Therefore hypothesis 8 was not confirmed.

Misrepresentations in self-disclosure, were examined independently, in addition to participation in the sum self-disclosure score as previously described.

Table 30 shows the sum of misrepresentations (lies) in each subgroup as well as identifying the particular family in which more than 5 lies were reported by a subject. Although total lies in patient families were approximately equal to the control families, i.e. 60 to 66, it was interesting to notice that male siblings lied the least and appeared to be most believed by their parents, while for male patients the reverse was true. This was not tested statistically because of the irregularity in distribution. Instead, clinical issues in the families with the highest lie scores will be examined in the discussion which follows this chapter.

The Trait Scale

In this study liking for other family members was operationally defined as the sum score on the Trait Questionnaire. Hypothesis 9 predicted that schizophrenics self-disclosure to each parent will not be correlated with liking for the parent to whom disclosures are made. The self-

Table 30

Total Number of Self-Disclosure Items Rated as Misrepresented (lies) by Offsprings, or by Parents Rating Offsprings

	Disclosure to Father	Disclosure to Mother	Report by Father	Report by Mother
Patients				
Male N=12	5	4	2	22[b]
Female N= 8	7[a]	4	2	3
Siblings				
Male N= 9			1	
Female N=11	2	4	1	3
Controls				
Male N=21	11[c]	12[d]	11[g]	2
Female N=19	10[e]	10[f]	9[h]	1

Subjects reporting > 5 lies identified by family number

[a] Family 6 - 7 lies
[b] Family 11- 7 lies
[b] Family 19- 10 lies
[c] Family 48- 9 lies
[d] Family 48- 5 lies
[e] Family 50- 5 lies
[f] Family 50- 7 lies
[g] Family 37- 7 lies
[h] Family 46- 6 lies

disclosure of siblings and controls are expected to correlate highly with the degree of liking for the parent to whom disclosures are made.

Trait scores were tested for correlation with the self-disclosure scores for all subject groups by the Spearman Rank-Order Correlation Method. Only one correlation approached significance ($p < .10$), that of the female patients' disclosure to and liking for father ($r_s = .69$). Clearly, Hypothesis 9 was not supported.

It was then decided to subject the sum-trait scores to a post-hoc contrast between the three groups, again broken down by sex. No significant differences were found.

One of the important theories proposed by Lidz and his associates (1965) emphasized the structural differences in schizophrenic families identified as "skewed" or "schismatic". The former term refers to families in which there was extreme dominance by one parent with concurrent devaluation of the other. The latter term refers to families in which the relationship between parents was marred by open and equal combat with each parent attempting to gain the loyality of their favored offspring (usually of the opposite gender). The skewed families, according to Lidz, tended to produce male schizophrenics, while the schismatic family produced female schizophrenics.

This study attempted to operationalize the family patterns by use of the sum-trait scores of offsprings rating

parents and parents rating each other. Families in which there was a larger disparity between spouses ratings for each other, with offsprings tending to rate the parents with a similar disparity were labeled skewed. Families in which both parents rated their spouses considerably lower than did the offsprings, with offsprings tending to rate the opposite gender parent higher were labeled schismatic.

Table 31 presents the individual trait scores by patient family. Inspection indicates that among families labeled skewed by criteria of their trait scores there were 5 male patients, and 5 female patients. Among the families labeled schismatic there were 3 male patients, 2 female patients. Thus, the hypothesis relating family type to the gender of the identified patient was not supported. In order to assess whether the problem lay not so much with theory as with operationalization, a second criterion was established. Family therapists were asked to rate the family by the criterion established in Lidz (Lidz et al., 1965). These criterion when applied to gender of patient also did not support Lidz (see Table 32).

Table 33 presents the mean self-disclosure scores for siblings who have not been in therapy and for those siblings who have participated in family therapy, broken down by sex. There is no indication that participation in family therapy results in higher disclosure to parents.

Table 31

Sum Trait Scores of Spouses, Patients, and Siblings

Rating Fathers and Mothers

Family	Rater	Father	Mother	Skewed or[a] Schismatic	By Therapist Report
1	Spouse	59	62	Neither	Neither Type
	Patient M.	78	70		
	Sibling M.	81	87		
2.	Spouse	120	66	Skewed	Skewed
	Patient M.	101	74		Father
	Sibling M.	113	89		Dominant
3	Spouse	107	61	Skewed	Information
	Patient F.	86	81		not
	Sibling M.	99	53		Available
4	Spouse	84	57	Skewed	Skewed
	Patient F.	84	55		Mother
	Sibling F.	74	49		Dominant
5	Spouse	65	64	Neither	Neither Type
	Patient F.	54	70		
	Sibling M.	80	80		
6	Spouse	102	68	Skewed	Skewed
	Patient F.	102	97		Mother
	Sibling F.	118	80		Dominant
7	Spouse	118	55	Skewed	Skewed
	Patient M.	167	89		Father
	Sibling F.	109	62		Dominant
8	Spouse	50	57	Neither	Skewed
	Patient M.	98	103		Mother
	Sibling F.	91	102		Dominant
9	Spouse	93	108	Schismatic	Skewed
	Patient F.	140	118	(Skewed)	Father
	Sibling M.	98	82		Dominant
10	Spouse	79	50	Skewed	Schismatic
	Patient F.	101	69		
	Sibling M.	95	64		

Note. Lower scores indicate higher degree of liking.

Table 31 (continued)

Family	Rater	Father	Mother	Skewed or[a] Schismatic	By Therapist Report
11	Spouse	136	125	Schismatic	Skewed
	Patient M.	109	120		Mother
	Sibling F.	120	179		Dominant
12	Spouse	141	85	Skewed	Schismatic
	Patient M.	97	122		(Divorced)
	Sibling F.	121	124		
13	Spouse	116	99	Schismatic	Skewed
	Patient M.	106	102	(Skewed)	Mother
	Sibling F.	104	73		Dominant
14	Spouse	57	70	(Skewed)	Skewed
	Patient M.	66	74		Father
	Sibling M.	53	67		Dominant
15	Spouse	101	112	Schismatic	Skewed
	Patient F.	100	107		Mother
	Sibling M.	129	117		Dominant
16	Spouse	107	74	Skewed	Information
	Patient F.	90	96		not
	Sibling F.	78	93		Available
17	Spouse	68	85	(Skewed)	Skewed
	Patient M.	71	103		Mother
	Sibling F.	90	127		Dominant
18	Spouse	109	52	Skewed	Information
	Patient M.	147	59		not
	Sibling F.	85	62		Available
19	Spouse	99	118	Schismatic	Information
	Patient M.	89	90	(Skewed)	not
	Sibling M.	103	106		Available
20	Spouse	88	68	Skewed	Schismatic
	Patient M.	101	57		
	Sibling F.	124	112		

Note. Lower scores indicate higher degree of liking.

[a] By criteria established from Sum Trait Scores (See text).

Table 32

Sex Distribution of Patients in Families
Rated Skewed or Schismatic By Lidz' Theory

	Rating By[1] Trait Scores	Rating By[1] Therapist
Supporting Lidz	7 (4)	8
Schismatic with Female Schizophrenic	2	1
Skewed with Male Schizophrenic	5 (4)	7
Not Supporting Lidz	8 (1)	6
Schismatic with Male Schizophrenic	3	2
Skewed with Female Schizophrenic	5 (1)	4

[1] Interrater agreement 62%

Table 33

Family Therapy Participation and Mean Self-Disclosure of Patients and Siblings

		Patient			Sibling		
		To: Father		Mother	To: Father		Mother
Family #	Patient and Parents in Therapy[a]	Sex			Sex		
1	3 months, 1 X weekly	M	48	61	M	60	71
2	3 months, 1 X weekly	M	56	56	F	9	50
7	4 sessions	M	71	72	F	43	75
8	3 months, 1 X weekly	M	28	35	F	31	62
9	5 sessions	F	24	55	M	35	37
12	Patient & Mother 8 X (With Stepfather)			18			48
	Patient & Father 4 X	M	14		F	17	
15	2 months, 1 X weekly	M	26	26	F	26	43
17	3 months, 1 X weekly	M	66	65	M	59	40
20	1 year, bi-weekly	M	66	65	M	59	40
	Males M		44.1	45		47.3	48.8
	Females M		31.5	48.5		25.2	55.6
	Patient, Parent(s) and Siblings in Therapy						
4	Mother & older sister, 3 months, 1 X weekly	F	44	47	F	31	70
5	Brother, 3 months, 1 X weekly	F	84	65	M	26	28
6	All sibs, 6 sessions	F	19	42	F	43	43
10	Brother, 4 months, 1 X weekly	F	48	74	F	67	67
13	All sibs except second oldest brother	M	28	29	F	13	28
14	All sibs	M	54	51	M	36	37
	Males M		41	40		31	32.5
	Females M		49	57		38.5	53

Note. Both parents present unless otherwise indicated.

[a]Sibs visiting 1 X for interview purposes were not included in this category.

CHAPTER IV

DISCUSSION

The major objective of this study was to examine degrees of communication in families with both a schizophrenic offspring and sibling discordant for schizophrenia, in an attempt to identify patterns of responses between parents and sibling which may have contributed to the latter's avoidance of the schizophrenic's fate. By this means it was hoped that pathological family influences long postulated in the literature on schizophrenia might be explored, but more importantly, constructive strategies of the sibling might be pinpointed and become a model for behavior to be fostered in the schizophrenic. Family therapy provides a unique opportunity to intervene by fostering such behaviors in interactions with parents.

To achieve this aim, the patterns of self-disclosure to parents, and parents' perceptions and expectations of their offsprings' disclosures were examined in three subject groups: schizophrenics, siblings, and control offsprings from the general population. A number of hypotheses related to the response patterns of these groups were proposed and tested.

This discussion will review the findings presented in the preceeding chapter as they pertain to specific hypotheses. Possible implications will be considered and illustrated by clinical material where relevant. Some general

thoughts on relationships in families with schizophrenic offsprings as contrasted with "normal" families will be offered along with applications for therapy. The discussion will close with an examination of the limitations of this study and recommendations for future research.

Self-Disclosure

This study first examined self-disclosure as a composite dependent variable without regard to differing qualities in the material being disclosed. In this approach it followed most previous studies in assuming that a sum score of self-disclosure in a range of low to high intimacy topics would represent an accurate measure of interpersonal exchange.

Hypothesis 1 proposed that schizophrenics would be more self-disclosing to parents than their siblings but less self-disclosing than control offsprings. If both were true it would logically follow that siblings would be expected to be lower disclosers than controls as well.

This hypothesis was, in part, contrary to the general assumption that self-disclosure is positively related to good mental health, which would implicate schizophrenics as lower disclosers than their siblings. Further, a large proportion of patients in this study carried a paranoid diagnosis, associated with guardedness and interpersonal aversiveness mitigating against self-disclosure.

The results failed to confirm higher (or lower) over-

all self-disclosure of schizophrenics as compared to their siblings. However, findings supported a portion of the hypothesis: siblings disclosed less to their fathers and mothers than did control offsprings. This pertained to subgroupings by sex as well, except in the case of female siblings' disclosure to mother which approached the high level of disclosure to mothers reported by control females. This is discussed further below. Though there were no significant schizophrenic with sibling contrasts, it was found that schizophrenics — sexes merged — were less disclosing to mother than were the controls, again in partial support of Hypothesis 1. In general, results corroborated Jourard's (1971) and others (Mayo, 1968; Pederson & Higbee, 1969a) views that mental health is positively related to self-disclosure, since the controls were generally more self-disclosing than were siblings (and to some extent schizophrenics) from pathologically implicated families.

In the methods section of this study reference was made to the value of examining the correlations between offspring reported self-disclosure and parental reports of their impression of how much was disclosed to them by their offsprings. While not conceptualized as a true test of validity, since neither report may be an accurate rating of real behavior, strictly speaking such correlations do provide an operational index of the harmony of perception in the relationship within families.

In considering this question it is important to note that there were no significant differences between parental ratings of schizophrenics', siblings' and normal offsprings' disclosures. Further, as can be graphically seen from a visual inspection of Figure 1, parents in general tend to rate their offsprings as higher disclosers than offsprings rate themselves. Nevertheless, certain subgroups of offsprings-to-parents could be identified as more in tune with one another's perceptions.

In normal families it appears that, not only are offsprings high disclosers to their mothers, but that they each agree on how much disclosure actually goes on. A striking difference was noticed for offsprings and their fathers for whom correlations were extremely low and not significant. It would be easy to cite the American myth of the inaccessible, preoccupied and non-communicating father (Reynolds, 1978) to rationalize this pattern. However, post hoc analysis of the data revealed that there were six (out of 40) highly disparate (± 2 SD) offspring-father responses to which the low correlations could be attributed in large measure. Examining these families yielded startling results in that these contained virtually all the control family subjects reporting psychiatric treatment in their past. The individual family backgrounds are presented in a later section (together with results on Hypothesis 7).

Turning to the parent-offspring correlations for

patient and sibling groups, we find that overall, siblings and their parents showed a meaningful correlation of their reports with both mothers and fathers while the schizophrenics did not. In examining specifics within the sexes, it was found that female schizophrenics and their fathers, as well as male schizophrenics and their mothers had far higher correlations (r_s = .68, r_s = .54) that approached significance while the correspondence with same-gender parents was negative and extremely low, implying that the former two relationships are intimate, while the latter two are disturbed.

This highlighting of distinctions between cross-gender and same gender relationships of schizophrenics with parents appears consistently in the literature. It is a strong underpinning in the research on skewed and schismatic families (Lidz et al., 1965). That sex differences require careful scrutiny was a cornerstone of this study and led to the formulation of Hypotheses 3, 4, and 5 which will be discussed here, as it relates to overall self-disclosure.

The secondary Hypotheses 3, 4, and 5 related to expectations that schizophrenics tend to lose boundaries and develop an intense love-hate relationship with the opposite sex parent. In addition to correspondence between their reports on disclosure (see above) an effect of this relationship is proposed by Hypothesis 3, that schizophrenics will show larger disparity scores (that is greater differences between their self-disclosure to mother and father) than will

siblings. When the combined patient population was examined this hypothesis was disconfirmed, that is schizophrenics disclosed more equally to each parent than did the siblings. To cast light on this finding requires that we understand the nature of the material being disclosed. This will be discussed in the next section where the intimacy level of disclosures will be shown to differentiate between disclosures to mothers and fathers.

In testing Hypothesis 4 and 5, same-gender and cross-gender disclosures to parents were examined. Hypothesis 4, which stated that disclosure to same-gender parents will be lower in schizophrenics than in siblings or controls was supported only in relation to the latter. Hypothesis 5, the converse, that schizophrenics disclosure to cross-gender parents would be higher than siblings or controls did not reach significance. However, it was found that siblings were significantly less disclosing to cross-gender parents than were control offsprings. In effect, these findings were subsumed under the more general ones stated earlier since, in relation to fathers and mothers siblings (with the exception of females to mothers) were found to be less disclosing than were control offsprings.

A most intriguing relationship came to light in examining these results. That is, that female siblings' disclosure pattern to mother and father are the most aberrant of all the subgroups, with a mean difference of 21 points

(Table 6). Female siblings disclose highly to mother but are the lowest disclosers of all subgroups to father. However male siblings, as stated earlier, were consistently lower disclosers to both parents than were the control group. What appears to be happening is that a general avoidance and distancing tendency on the part of siblings of schizophrenics, well documented in the literature (Lu, 1961, 1962; Meissner, 1971; Mishler & Waxler, 1968), has been confounded by a cultural bias for women to be self-disclosing to their mothers. This finding reenforces the importance of analyzing sexes separately in research.

The cultural bias can be seen operating in the normal family as well. Control females were shown to be more self-disclosing to their mothers than fathers. For control males, however, mean disclosures to mother and father were quite close. These results are consistent with those reported by Doster and Strickland (1969).

Levels of Intimacy

Hypothesis 6 stated that schizophrenics would be erratic in their pattern of disclosure, reporting greater self-disclosure on highly intimate topics and less on low intimacy topics. It was also prediced that the siblings and controls would report consistently greater disclosure on low intimacy topics than on high intimacy topics. The latter is an expectation derived from the literature on

normal populations who tend to disclose less as topics become more personal (Fitzgerald, 1963; Jourard & Lasakow, 1958; Taylor, 1968). Therefore, it was also the expectation for normal offspring groups in the present study.

A factor analysis proved a satisfactory means of dividing items into groupings that reflected low, moderate, and high intimacy levels. Mean factor scores were analyzed across all 13 orthogonal factors for each subject group. Eight of the 13 factors offered significant contrasts between one or more groups and two additional factors showed trends approaching significance. The contrasts strongly supported the hypothesis in both high and low intimacy areas when schizophrenics were compared with their siblings or when these two groups were each compared with control offsprings.

As before, examination of the data required differentiation between sexes. In this portion of the study it was even more critical, for it was found that several of the factors were gender specific and differentiated either between male or female groups. In some instances the significance of combined sex groups relied heavily on support from one sex group. Moreover, as these differences came to light, the topics seemed to easily generate phenomenological support for the effect on one or another sex. Therefore, it was deemed appropriate to discuss the results for men and women separately as subgroups within the sections

on high disclosure. At the end of the section a review will be made of the data as it pertains to schizophrenics and siblings.

Female disclosure in topics of high intimacy. Female schizophrenics showed an exaggerated disclosure regarding mother in reference to Major Areas of Concern. This might be accounted for by their involvement in family therapy, individual therapy, and group therapy where they are encouraged to share problems and anxieties in great depth. Female siblings communicate much less fully in this area than do the schizophrenics. Can it be assumed she has fewer problems to communicate, or that, in contrast to her disturbed sibling her own emotional concerns seem trivial? A more likely explanation is that some aspect of the relationship with her mother impedes the flow of intimate self-disclosure. It may be denial of problems, constriction which has been described by many studying the siblings of schizophrenics (Lidz et al., 1965; Lu, 1961, 1962), or perhaps an increased focus on intimacy outside the home. It was noted that four of the 12 female siblings were married but no distinctions in self-disclosure were found between married and unmarried female siblings on a Mann-Whitney Test of significant differences. The relationship between overall disclosure scores and this factor proved interesting. Female siblings cannot be said to differ from normal female offsprings in total disclosure to mother. Therefore, it may be assumed

that there is a selective avoidance of intimate discussion related to emotional concerns.

Female schizophrenics' high disclosure to father regarding their sexual behavior hints at an inappropriate level of intimacy which is not true for either female siblings or control offsprings. In fact, the strikingly low total level of disclosure by female siblings (mentioned earlier) suggests that they avoid the undercurrents of seduction by avoiding all intimacy with their fathers, and maintaining at least superficially good rapport with their mothers. (Note both high overall— but not intimate — disclosures to mother and high concurrence with mothers' reports of disclosure by their daughters.)

The impression received further support from a collapsing of all high intimacy factors which again showed female schizophrenics the highest disclosers to their fathers, with siblings and normal females clearly less disclosing.

Male disclosure in topics of high intimacy. If Factor X, Negative Affect and Experiences, can be equated with expression of feelings, it would seem that male siblings have considerable difficulty sharing feelings with either fathers or mothers. While it can be said that in our culture males have been less given to expression of their feelings (Lamb, 1976) this is certainly not born out by the report of male offsprings among the normal families, who were shown to be much more open in this area, than were sib-

lings.

Male siblings, however, were considerably more vocal to their fathers (and to their parents combined) than were male schizophrenics in discussing their views on the maladjustment of family members, including father and mother. It is possible that these disclosures relate more to concern about their schizophrenic siblings or to complaints about father when talking to mother - mother when talking to father (which would suggest an undercutting alliance); but since their overall level of disclosure is significantly lower than normal males, it is more likely that high disclosure in this instance represents "negative interpersonal expressiveness" (Mishler & Waxler, 1968), a quality of distancing in the relationship.

Gilbert (1976) has delineated three criteria for evaluating self-disclosure: content, intimacy, and valence. We have thus far examined content and intimacy. Valence refers to the positiveness or negativeness of the content. In this instance valence seems of particular importance in understanding the effect of intimate communications; when intimate the siblings disclosures are negative and distancing.

Reference was made in Chapter I to the work of Mishler and Waxler (1968). They reported that male schizophrenics had a low index, and female schizophrenics had a high index of "negative interpersonal expressiveness" in their families.

The present results seem to bear out the relatively lower expression of criticism addressed to parents in general, and fathers specifically by schizophrenic males. Inspection of Figure 3 suggests a higher degree of interpersonally aversive self-disclosure by female schizophrenics to fathers, than either female siblings or controls which would again be consistent with Misher and Waxler (1968). Unfortunately, the effect did not reach significance.

Topics of low intimacy. Hypothesis 6 also predicted that schizophrenics would report less self-disclosure in topics of low intimacy than would their siblings. This is the converse of the prediction related to high intimacy topics. Siblings were expected to approach control offsprings in reportedly sharing thoughts that do not touch on private or very personal matters openly with their parents. This hypothesis was clearly supported by examination of the two low intimacy factors which discriminated between the groups in question. Schizophrenics proved to be less disclosing than either siblings or controls from normal families.

To understand this phenomenon we should consider the content that schizophrenics avoided. Low intimacy topics may fall in either the public or private sector. In the present study each seemed to conform to one of the low intimacy factors. Factor VII dealing with preferences in home and meals clearly fell under the rubric personal sec-

tor, while Factor VIII dealing with opinions on public issues could be classified as a public area. These factors each provided some insight on males and females, and so the sexes will be discussed together in this section.

On topics related to home and meals both male and female schizophrenics presented as less disclosing to both father and mother than were siblings or controls. The latter two groups did not differ from one another. Several possible explanations may be made for this disclosure pattern. The best speculation relates to the symptom in schizophrenics known as anhedonia, the absence of pleasure (Freedman et al., 1975). Lack of disclosure may be the result of indifference to surroundings or experiences. Mitigating the plausibility of that explanation is the apparent equivalence of disclosure for Factor II, Interests and Tastes. If anhedonia reduced disclosure in areas under parental control (most of the schizophrenic subjects were living with their parents while in the Day Hospital), why did it not depress their disclosures regarding preferences in reading, music, television, etc. relative to other groups. Of course an inability to prove the null hypothesis does not allow us to state with assurance that schizophrenics did not differ in reality from other groups, but negative evidence is suggestive.

More speculative, but plausible, is that schizophrenics have not had the prerogative of expressing preferences in

domains controlled by their parents. It is not unusual in family therapy to hear a parent cite the patient's preferences with certainty as if they were the parent's own. The schizophrenic's boundaries are permeable and differentiation so impeded that patient's and parent's ideas may merge.

Related but somewhat different is the possibility that schizophrenics' problems with self-esteem may make them unwilling to risk censure or narcissistic injury if their preferences conflict with those of the parents. Here the concepts of the family myth and pseudomutualizing seem relevant (Stierlin, 1977; Wynne et al., 1958), with the myth being that home is perfect!

Turning to the low intimacy factor related to the public sector we again find schizophrenics the low disclosers. Here father is the target parent to whom disclosures discriminate best between groups. This is not to say that the three groups do not discuss public issues with their mothers. However, there are few meaningful differences between the schizophrenic, sibling, and control groups with the exception that male schizophrenics and male siblings show a trend toward disclosing less to their mothers about their political and social beliefs than do control males.

Regarding fathers, there are major differences in the disclosure patterns, with male and female schizophrenics disclosing less to their fathers about their views than

either siblings or control offsprings. It is important to note that male siblings also are less disclosing than control males to their fathers. Lamb (1976) suggests that fathers may discourage conversation by their authoritarian attitudes, rigidity and rejection of the ideas of others. Unfortunately, we have only limited data of a clinical nature to support this inference in the present study since the trait questionnaire was not as meaningful as was hoped (see below)

Topics of moderate intimacy. Moderately intimate topics were not directly addressed in Hypothesis 6. However, the results on Factor III added to the impression gained from the female siblings' low disclosure to father in topics related to sexuality. Factor III deals with physical appearance, both deeper concerns regarding body image and more superficial aspects such as clothes and figure. One might expect female offsprings to discuss these issues with their mothers more than their fathers. That is true for our sample. The surprise, however, is the exaggerated avoidance of this topic in the female siblings' disclosure to fathers. When fathers were the target parent, siblings (sexes merged) were the low disclosers, compared to schizophrenic or control offsprings; when mothers were the target parent, schizophrenics (sexes merged) were the low disclosers relative to either siblings or control offsprings. This phenomenon appears to be the graphic portrayal of the siblings' efforts

to take distance from pathological paternal influence.

Family patterns in self-disclosure. In summation we have a portrait of schizophrenics and siblings as regards their disclosure patterns to parents.

Schizophrenics could not be differentiated from siblings in their overall self-disclosure level. However, in relation to normal offsprings they disclose less to their mothers. Further, as regards female schizophrenics, their mothers appear to have a distorted and exaggerated perception of their disclosures to them.

When compared to siblings or normal offsprings, male schizophrenics are high disclosers of intimate topics relating to their emotions, but low disclosers on superficial topics to both father and mother.

When compared to their siblings or normal counterparts, female schizophrenics are high disclosers to mother and father on intimate topics with intimacies toward mother having to do with their emotional problems and intimacies with father relating to their sexual concerns and behavior. Female schizophrenics are lower disclosers on superficial topics to both their parents than either siblings or normals.

Siblings are lower overall disclosers than normal offsprings except that females appear to be as disclosing to mother as the normal female. Matched with female schizophrenic sisters they may actually be higher disclosers to mother. Female siblings and mother seem to agree about

their level of overall self-disclosure. Their disclosures tend to be higher in low intimacy topics related to home and meals and lower than schizophrenic females regarding intimate topics. Female siblings are exaggeratedly low disclosers to father and the difference between disclosure to father and mother is high.

Male siblings are low disclosers overall, and in areas of intimacy to father and mother. They are especially low disclosers to father about their bodily appearance and to mother about their feelings. In contrast, male siblings do disclose highly to fathers about family maladjustment. Male siblings discuss low intimacy topics with their fathers less than do normal males. Fathers are likely to see male siblings as lower disclosers than male schizophrenics, especially when compared in families with both male schizophrenics and male siblings.

Satisfaction and Misrepresentation

Having explored self-disclosure in schizophrenic and normal families we will now take up issues which may relate to the pressure in families to disclose or withhold. Hypothesis 7 stated that schizophrenics would experience more personal and parental dissatisfaction with their disclosures and a greater tendency to misrepresent themselves. This hypothesis was not supported.

The only meaningful finding on satisfaction was that

mothers report more satisfaction with the self-disclosure level of schizophrenic offsprings than mothers in normal families report in regard to their offsprings. This may be accounted for, in part, by the distortion of the level of the schizophrenic daughter's disclosure by her mother (see Figure 1) as well as the reality that schizophrenics, who at least in this sample, have had considerable individual, and in some cases family therapy, perceive self-disclosure as an ego syntonic goal even if they cannot bring themselves to actualize this. Similarly, to the extent that mothers feel disclosed to, they come to believe their children are getting better — that at least they are accessible to reason. Therapists at Hillside have reported that parents, and particularly mothers, attempt to allay anxiety about their offsprings' condition by being informed about "what's going on in his head!" Thus, the concern of the parents over their offspring's illness perpetuates a lack of appropriate boundaries with the patient. Both patients and parents feel enjoined to communicate more.

As stated in the chapter on results, misrepresentation will be discussed in terms of clinical issues in individual families. A few general points, however, should be made. First, in approaching the subjects, the word misrepresentation was used so as not to impart a pejorative tone. However, these responses are conceptualized as lies told to parents, or the assumption of parents that they were lied

to. Secondly, in spite of erratic distribution of lie responses, some trends appeared. Mothers of schizophrenics had the highest expectation that their schizophrenic sons lied to them. Of all offspring groups, male siblings reported no lies to parents and parents appeared to have confidence that members of this group did not lie to them. Since this group also reported low self-disclosure scores it would seem that an alternate to lying is silence. This raises the question of why adult offsprings lie to their parents rather than maintain their right to privacy. To speculate on an answer we must learn what offsprings lie about.

Offsprings lie most to their parents, but are not thought to be lying by the parents, regarding the following topics: personal views on sexual morality, drinking and drug use, personal religious views, the kinds of social gatherings they enjoy, and their disappointments with friends, especially of the opposite sex. This suggests that offsprings lie to their parents to preserve harmony or avoid consequences resulting from parental censure. It reflects changes in cultural mores that have increased the so called "generation gap".

A second set of topics appear to differentiate schizophrenic from normal families, with control offsprings reporting lies, while the parents accept their word in these areas; this in direct contrast to schizophrenic families where schizophrenics, and to some extent siblings claim

to be telling the truth, but parents believe them to be lying. The topics deal with: sexual gratification, negative aspects of personality, shortcomings, and favorite ways of spending spare time. This suggests that in some normal families, offsprings avoid exposing their deep problems to the scrutiny of parents; while in some patient families, parents assume their sons and daughters are lying, without justification in reality, according to offspring reports.

Families with Highly Deviant Responses. If high self-disclosure to parents is associated with good mental health, it would be important to examine the families which deviate most clearly from this pattern, especially among the normal families, and see if any degree of pathology might be evident.

We shall first describe the families with a high number of lie scores (see Table 28) beginning with families with a schizophrenic member. We shall also consider those families which include a member reporting extremely low disclosure score (below 15 points) and those families in which the disparity between the report of offspring disclosure to parent and parents' report of that disclosure is ± 2 SD from the mean for the group.

Family 6. The female schizophrenic patient diagnosed chronic undifferentiated admitted to seven lies to her father, with very low overall self-disclosure to him. This is a middle-class, observant Catholic family. Last year the patient's father suffered a myocardial infarction. The

parents have been open about describing their irritation regarding the patient's sexual promiscuity and provocativeness. The patient had been a heavy drug user at 15 years of age and had a history of sociopathic behaviors. Patient, parents and siblings were in family therapy for six sessions and terminated because of resistance to treatment - primarily by the siblings. The therapist described the siblings and patient as enraged at the parents' lack of parenting — "these children were their own parents". The mother is described as a hostile, dominant influence in the family.

Family 11. The mother in this low-middle class Jewish family thought her son, diagnosed as paranoid schizophrenic, had lied to her about seven topics. The patient was admitted to this third psychiatric admission with delusions of persecution and influence — "people are trying to control my mind." When seen initially in family therapy, the mother was described by the therapist as a seductively dressed obese woman. The mother described herself as strong, domineering and overprotective toward her children. The father was seen as bland and timid. In therapy the mother validated her son's statement that he has no sexual interests, by reporting that she checks his clothes and bedlinen each day for signs of semen. She also offered the therapist information about her son's sexual fantasies which he denied.

Family 3. is a patient family of upper-middle class Protestant background. The father had a psychiatric admis-

sion for manic-depressive illness which was diagnosed at 17 years of age following the suicide death of both his parents. He has been functional throughout adult life with periodic outpatient treatment. The mother is a European immigrant raised by a stepmother. The parents' marriage is described as difficult because of the fathers "nervous condition" with the mother in constant fear that her husband will commit suicide. There is open conflict about the father trying to spoil the children in the face of the mother's old fashioned discipline. The schizo-affective schizophrenic daughter blames her mother for her psychiatric problems. This patient decompensated after the loss of a boyfriend at 21 years of age. No lies were reported by members of this family. However, the patient reported self-disclosure 51 points lower than the mother's estimate, and her brother reported extremely low self-disclosure to the father.

The following control families reported lies:

Family 50. is a middle-class Jewish family with parents who emmigrated from Europe prior to World War II. The father has had a recent serious illness and the mother has in the past received treatment for reactive depression. The daughter, a high school senior, who admits a total of 12 lies to her parents, was in outpatient therapy during latency. Her mother reports taking pride in feeling they have a close relationship.

Family 48. is a middle-class Catholic family. The

father is a police detective, the mother a housewife. Both parents have a history of major physical illness, with residual impairment. Their son, who admits to lying to his parents on a total of 14 topics, reports 70 points lower self-disclosure than his father's estimate. He is a college student who attended parochial schools until 18 years of age. He had kidney disease during latency.

Family 37. is an upper middle-class Jewish family, with the father an attorney, and the mother a housewife. The father claims his son and daughter lied, in all, 11 times. The daughter, a medical student, reported an extremely low self-disclosure level to her father. The brother, a college student, had a relatively high pattern of self-disclosure to both parents. The father estimated his son's disclosure 43 points lower than the son's report. None of the family members report serious illness or psychiatric problems. They each describe having a range of interests and many friends.

Family 46. is a middle-class family with a mother who has had several major surgeries and has been hospitalized for manic-depression. The 26 year old daughter, who admits lying to her mother, was six years old at the time of her mothers' first psychiatric hospitalization. In responding to the questionnaire she expressed annoyance about the phrasing of the demographic question on opposite-sex friends and also the rating scale on the Trait Questionnaire, stating, "There is no neutral position, everything is either positive,

negative, or indifferent" (rating #3). Copies of the items she was referring to are found in Appendix A. In Family 46 the father reports very low disclosures by his son (66 points below the sons' report) and similarly the mother reports lower disclosure (39 points) than her son admits.

Family 40. is a middle-class Jewish family with divorced parents who have both been in therapy. The father is self-employed, his "major interest making money". The mother has just completed law school. Their 17 year old daughter, who was sent to boarding school, reported a very low self-disclosure score which contradicted her fathers' very high impression. She has been in outpatient treatment for three years and describes herself as "enjoying sex, rock and getting stoned." Her sister, a college student, has also been in therapy and shows a high self-disclosure closely correlated with parental report.

Examining the five out of 20 control families with disparate responses seven members who had been in psychiatric treatment were found. Only one other control family (#39) reported a member - a female offspring - in psychiatric treatment. This family had an unremarkable pattern of disclosure.

These findings supports those studies which have reported a meaningful relationship between self-disclosure and mental health, since extremely deviant self-disclosure patterns successfully targeted control families with members who have been in therapy.

What general statements may be made regarding schizophrenic and control families with disparate self-disclosure patterns in this study. The female schizophrenics appears to have disciplining, aloof parents, or a rigid mother and ingratiating father. The male schizophrenic's mother was seductive and intrusive while his father was passive. These family relationships match several of the clinical patterns described by Lidz et al. (1965).

In control families it was found that deviant patterns of disclosure efficiently distinguished those with a history of therapy for emotional problems. In those families with deviant patterns of disclosure that had no family members with a history of psychiatric treatment other qualities of distinction emerged. One family with deviant responses was rampant with physical ailments which suggests that the offsprings may altruistically shield the parents from worry. On the other hand, the father in this family (#48) is a police detective and disclosure patterns to him, as well as to the attorney in Family 37, may reflect rigid authoritarian attitudes which offsprings learn to evade rather than confront head on. An interesting side note is that two of the patient families also were fathered by police officers. Of course, this may be a sampling bias, but a recent study (Maslach, 1979) described the extreme pressures on families of police officers as their work stress moves them toward more arbitrary and extreme authoritarianism.

Liking for the Target Person and Self-Disclosure

Hypothesis 9 stated that the schizophrenics' level of self-disclosure would not be related to his liking for the parent to whom he disclosed. Further, it predicted that, for the sibling and controls, liking for parents would be an important issue in self-disclosure. The hypothesis was not supported.

In the instance of the female schizophrenics there was some evidence that liking for the fathers increased self-disclosure, which was contrary to expectations. In the light of the findings discussed earlier, it would now seem important to know what were the specific qualities which contributed to this high degree of liking. The sum-trait score while suggestive seems too general to tease out the important clinical differences in families.

The use of the trait scores to differentiate between skewed and schismatic families again offered little benefit in supporting theories of Lidz and his associates (1965). It did show, however, that in 75% of the families with schizophrenic patients, both offsprings and spouses agreed on who the favored parent was. Unfortunately, four of the five families regarded as schismatic on the basis of the spouses' trait scores showed both offsprings in agreement about the favored parent, which was contrary to the Lidz expectation which proposed an allignment with opposite-gender parents, or each offspring (in same-sex pairs) alligning with an

opposing parent.

The problem may have less to do with Lidz' theory and more to do with the way it was operationalized here. Poor agreement between trait rating and therapist reports also suggests that this needs to be explored in further research.

Self-Disclosure in Normal (Non-Schizophrenic) Families

A predominant portion of research in the general area of self-disclosure has been on normal populations. This research, with its focus on presumed pathological families was not expected to add much to what was already known about normal families. However, the contrasts between offspring and parental reports added a new dimension to be studied.

In general, the higher disclosure of females to their mothers over their fathers and the equality of disclosure to parents by males was confirmed. Extreme disclosure patterns were sometimes identified with emotional problems (of a neurotic type) in offsprings or more serious pathology in parents. This study suggests that self-disclosure cannot be viewed simplistically - content, intimacy, valance, sex difference and target person are all important variables. Specifically in relation to the last mentioned variable, it would seem that healthy offsprings respond to intrusiveness and mistrust by parents, through withdrawal from the relationship at least so far as intimate disclosure is concerned. This may be an adaptive response and if so, its more extreme expression in the siblings of schizophrenics may be their

most impressive armamentarium against the inroads of family pathology.

How healthy were our "healthy" offsprings and therefore how meaningful the contrasts with schizophrenics? If we examine their mean age of 20 and compare it to the schizophrenic population's age at first psychiatric admission it is clear that a significant number have not reached the age at which an acute schizophrenic break is most likely to occur. On the other hand, of the siblings of our schizophrenics, half were beyond the age likely for a first break. In 21 families of schizophrenics who completed the testing procedures only two psychotic siblings were found (in the family eliminated from the study). Given the proven higher incidence of schizophrenia in the siblings of schizophrenics, over that of the general population, it becomes statistically unlikely that a member of the normal offspring group will become schizophrenic in the future.

Implications for Family Therapy

The major finding in this study was that siblings are less disclosing to their parents than are either schizophrenics or normal offsprings. When they did disclose it was usually in less intimate areas. Same sex siblings of schizophrenics were also the most resistant to involvement in this study which suggests their strategies for avoiding intimate self-disclosure are more rigid than opposite sex siblings. This tends to confirm the theories and findings of Alanen

(1971) that certain families threaten the integrity of one sex over the other, increasing the defenses needed for emotional survival.

Though the statistical analysis of results suggested different patterns of disclosure in males and females, no conclusive patterns relating to personality and behavior of parents to the vulnerability of a particular sex was proven. Nevertheless, the clinical material points in that direction, Perhaps it is oversimplifying to suggest two types of families — skewed and schismatic, when in fact there may be more. The limiting factor would be collecting sufficient subjects to define these family patterns. That must await further study.

This study provides a plausible reason to discourage the euphemistic use of "better communication" as a stated goal in therapy. This is too often misperceived by family members as a recommendation to increase intimacy and disclose totally, sometimes with destructively uncontrolled negative affect, rather than to develop more clear, effective communication without ambiguity. An important aim is to help the patient change behavior in relation to his embeddedness in the family system - to move out of the parents sphere of influence by finding more support among peers and temporary parent surrogates such as teachers and therapists. This can serve to diffuse parental control and intrusiveness or substitute for indifference on the part of hostile parents.

Since patients' major communications are about symptoms and problems, which in many ways provides secondary gain by increasing parental attention or control it would seem important to change the focus of dialogue to more superficial and behavioral areas.

A Day Hospital program is an ideal setting in which to help patients learn to communicate or develop interests apart from symptoms. By focusing on areas in which self-esteem and peer contact can be fostered, it may be possible to defuse any disconfirming messages from parents that weaken the schizophrenics' sense of worth as a human being.

Limitations of this Study and Recommendations for Future Research

There are clear limitations to the generalizations presented in this study as a result of sampling bias. The majority of families were of middle-class socioeconomic status and from an urban setting. Further, most of the schizophrenics and their siblings (as well as the control subjects) were of college background or college potential. Among the patients there were two Merit Scholars and one high school valedictorian. Two patients, three siblings, and five control offsprings had attended Ivy League schools and many others attended the more competitive state colleges. Clearly, most of the patient group would fall under the category of reactive rather than process schizophrenia, based upon their good premorbid functioning (Higgins, 1971).

Therefore, it would be inappropriate to apply these findings to the more variable population of schizophrenics encountered in the average state hospital.

The siblings in this study were not as impaired a group as one might expect in the siblings of process schizophrenics where genetic factors loom large. One benefit is that the behaviors of siblings portrayed by this study could be viewed along an adaptive-maladaptive continuum with possibly less likelihood of confounding with a biological substratum.

The major problem in this study was dealing with a relatively small number of subjects when extracting information about sex differences. Ideally, future studies should aim at increasing the number of subjects and counterbalancing the schizophrenic-to-sibling sex distribution in order to contrast within-family patterns more effectively. This might prevent the frustration of seeing apparently impressive differences emerge on a graph, only to have them declared meaningless by statistical analysis.

Another fruitful avenue of research might involve an expansion and reworking of the Trait Questionnaire so that it could provide more data in personality variables in family members, which might relate to the dimension of self-disclosure. Alternately, personality scales already available might be used.

One trait which particularly suggests study because of questions about the effect of authoritarian fathers on the

self-disclosure of offsprings, is that of the authoritarian personality conceptualized by Adorno, Frankel-Brunswik, Levinson, and Sanford (1950). An authoritarianism scale based on their work has previously been used to relate self-disclosure with authoritarianism of the discloser (Halverson & Shore, 1969). This study suggests an application to the target person to whom disclosure are made.

Finally, an expanded self-disclosure scale tapping areas of particular significance and including disclosure to peers as well as parents, might be used to predict patients' resources in successfully tolerating the stress of moving out of their parents' home.

The introduction to this dissertation began with a description of a single family with a schizophrenic patient. The original plan was to study this family for its clinical richness. This idea gradually gave way to an empirical statistical study. Perhaps the most exciting experience in doing this work has been to find how clinically rich such an approach can become.

APPENDIX A

Subject Response Forms

Pages 143-144 Subject Consent Form (filled out by all subjects).

Pages 145-147 Self-Disclosure Questionaire (as presented to offsprings). Parents' forms included the subheading: "Topics your offsprings may have spoken about to you."

Page 148 Instructions (as presented to parents). Instructions to offsprings included addtional instructions for rating "Father's Satisfaction" or Mother's Satisfaction".

Page 149 Parents' Rating Form for Offspring's Disclosure. Offsprings' forms had the following headings:

Disclosure to Father	Satisfaction Mine	Father's

or

Disclosure to Mother	Satisfaction Mine	Mother's

Pages 150-151 Trait Questionaire (as presented to parents). Offsprings' forms referred to Father's or Mother's traits, but was otherwise the same.

LONG ISLAND JEWISH - HILLSIDE MEDICAL CENTER

Subject Consent Form (Study)

Investigator: Felice Greene, M.A.

Title of Protocol: A Comparison of Self-Disclosure Patterns of Hospitalized Psychiatric Patients and Their Non-Patient Siblings Within the Family System

I hereby agree to (have my ward) participate as a subject in the following project: This is a study comparing hospitalized psychiatric patients with their non-patient siblings regarding the amount and type of personal information communicated to their parents.

I understand that the project will include the following experimental procedures: Response to three written questionaires to provide the following information: the type of confidential and non-confidential information about oneself disclosed to parents; personality traits of family members; a brief personal history.

I understand that the possible discomforts or risks are as follows: Some persons might feel mildly anxious answering questions about their family members. This may be lessened by knowing that confidentiality will be respected. Some persons might find one of the questionaires tedious though the entire procedure is expected to take less than one hour.

I also understand that the possible and desired benefits of this project are: We hope this study will clarify and enhance treatment approaches in family therapy that will make communication between family members more helpful to the patient and family. Through greater understanding of patients we hope to benefit those participating in this study as well as others.

I am aware that the following alternative procedures could be of benefit to me (my ward): Not applicable to the present study.

I have been given an opportunity to ask further questions and know that I can do so during the course of the project.

I am aware that I may withdraw my (ward's) participation at any time.

I understand that should I have any questions about my (ward's) treatment or any other matter relative to my (ward's) participation in this project, I may call the Research Grants Management Office at (212) 470-2386, and I will be given an opportunity to discuss, in confidence, any questions with a member of the Human Subjects Review Committee. This is a Committee which, as required by Federal regulations and New York State law, is an independent committee composed of Medical Center physicians and staff as well as lay members of the community not affiliated with this institution. This committee has evaluated the potential risks and possible benefits of this study.

I also understand that under no circumstances will my name or participation in this project be disclosed.

I hereby _____ agree to release the information I provide in this study to hospital personnel directly involved in my _____ treatment, if in the opinion of the investigator, such information would be helpful in my _____ treatment.

Patient's Name _____ Date _____
(Print)

Patient's Signature _____ Patient Number _____

Parent's Name _____
(Print)

Parent's Signature _____

Sibling's Name _____
(Print)

Sibling's Signature _____

Witness _____
(Print)

Witness' Signature _____

SELF DISCLOSURE QUESTIONAIRE

I. Attitudes and Opinions

1. What I think and feel about religion; my personal religious views.
2. My personal opinions and feelings about religious groups other than my own, e.g., Protestants, Catholics, Jews, atheists, Moslems.
3. My views on communism.
4. My views on the present government- the president, government policies, etc.
5. My views on the question of racial integration in schools, housing, etc.
6. My personal views on drinking and drug use.
7. My personal views on sexual morality- how I feel that I and others ought to behave in sexual matters.
8. My personal standards of beauty and attractiveness in women- what I consider to be attractive in a woman.
9. The things that I regard as desireable for a man to be- what I look for in a man.
10. My feelings about how parents ought to deal with children.

II. Tastes and Interests

11. My favorite foods, the ways I like food prepared, and my food dislikes.
12. My favorite beverages, and the ones I don't like.
13. My likes and dislikes in music.
14. My favorite reading matter.
15. The kinds of movies that I like to see best; the TV shows that are my favorites.
16. My tastes in clothing.
17. The style of house, and the kinds of furnishings that I like best.
18. The kind of party, or social gathering that I like best, and the kind that would bore me, or that I wouldn't enjoy.
19. My favorite way of spending spare time.
20. What I would appreciate most for a present.

III. Personality

21. The aspects of my personality that I dislike, worry about, that I regard as a handicap to me.
22. What feelings, if any, I have trouble expressing or controlling.
23. The facts of my present sexual life- including knowledge of how I get sexual gratification; with whom I have relations, if any.
24. Whether or not I feel that I am attractive sexually; my problems, if any about getting favorable attention from the opposite sex.
25. Things in the past or present that I feel ashamed and guilty about.
26. The kinds of things that make me just furious, and how I deal with them.
27. What it takes to get me feeling real depressed and blue.
28. What it takes to get me real worried, anxious, and afraid.
29. What it takes to hurt my feelings deeply.
30. The kinds of things that make me especially proud of myself, elated, full of self-esteem or self-respect.

IV. Body

31. My feelings about the appearance of my face- things I don't like, the things I might like about my face and head- nose, eyes, hair, teeth, etc.
32. How I wish I looked; my ideal for overall appearance.
33. My feelings about different parts of my body- legs, hips, waist, weight, chest, etc.
34. Any problems and worries that I had with my appearance in the past.
35. Whether or not I now have any health problems- e.g., troubles with sleep, digestion, female complaints, heart condition, allergies, headache, piles, etc.
36. Whether or not I have any long range worries or concerns about my health, e.g., cancer, ulcers, heart trouble.
37. My past record of illness and treatment.
38. Whether or not I now make special efforts to keep fit, healthy, and attractive, e.g. calisthenics, diet.
39. My present physical measurements, e.g. height, weight, waist, etc.
40. My feelings about my adequacy is sexual behavior- whether I feel able to perform adequately in sex relationships.

V. Relationships and Experiences

41. The unhappiest moments in my life.
42. How I react to others criticisms and praise of me. The things they criticize and praise me for.
43. In what way I think various members of my family may be "maladjusted".
44. Characteristics of my mother that I do not, or did not like.
45. Characteristics of my father that I do not, or did not like.
46. What I feel are my shortcomings and handicaps that prevent me from working as I'd like to, or prevent me from getting ahead.
47. Persons in my life whom I most resent and why.
48. Difficulties I have with financial support.
49. How much time I spend in reverie, or fantasy.
50. Disappointments with the opposite sex, or with friends I have experienced.

INSTRUCTIONS

People differ in the extent to which they let their parents know them; in what they consider appropriate to let be known about themselves. We are seeking to investigate what your offsprings have told you about themselves. Some of the topics will be considered more personal and private than others.

Parents may sometimes wish that their offsprings had disclosed more freely about themselves. At other times, parents may feel they have been told things better left unsaid, things too personal and private. We are interested in knowing whether you have been satisfied with how much each of your offsprings participating in this study has told you about himself/herself.

You have been given a list of topics that pertain to your offsprings. You have also been given answer sheets for each offspring with the headings: DISCLOSURE BY _____, and My SATISFACTION.

Please read each of the 50 items on the questionaire and indicate on the answer sheet the extent to which you believe the offspring named has talked about each item to you. How much do you feel you have been told about that person? How accurate a picture do you think has been given you? Please use this rating scale for your answer by inserting the appropriate symbol on the line next to the item number you are rating.

DISCLOSURE RATING SCALE

0 - The person has told me nothing about this aspect of himself/herself.

1 - The person has talked only in general terms about this. I have only a general idea about this aspect of the person.

2 - The person has talked in full and complete detail about this item. I know the person fully in this respect.

X - I believe the person has misrepresented himself/herself to me and given me a false picture of this aspect of himself/herself.

After you have filled in the DISCLOSURE column for an item please use the SATISFACTION RATING SCALE below to indicate how satisfied you are about how much your offspring has disclosed on that item. Mark your answer by circling the appropriate letter in the column marked My SATISFACTION.

SATISFACTION RATING SCALE

S - Am satisfied with how much has been told to me.

G - Wish greater detail had been told to me.

L - Would prefer that less had been told to me.

DISCLOSURE RATING SCALE

0 - Has told nothing about this.
1 - Has talked in general terms about this.
2 - Has talked in detail about this.
X - Probably misrepresented about this.

SATISFACTION RATING SCALE

S - Satisfied with how much has been told.
G - Wish greater detail had been told.
L - Wish less had been told.

(Please insert the name of an offspring participating in the study)

DISCLOSURE BY _____ Item #	0 1 2 X ↓	MY SATISFACTION	DISCLOSURE BY _____ Item #	0 1 2 X ↓	MY SATISFACTION	DISCLOSURE BY _____ Item #	0 1 2 X ↓	MY SATISFACTION	DISCLOSURE BY _____ Item #	0 1 2 X ↓	MY SATISFACTION	DISCLOSURE BY _____ Item #	0 1 2 X ↓	MY SATISFACTION
1 _____		S G L	11 _____		S G L	21 _____		S G L	31 _____		S G L	41 _____		S G L
2 _____		S G L	12 _____		S G L	22 _____		S G L	32 _____		S G L	42 _____		S G L
3 _____		S G L	13 _____		S G L	23 _____		S G L	33 _____		S G L	43 _____		S G L
4 _____		S G L	14 _____		S G L	24 _____		S G L	34 _____		S G L	44 _____		S G L
5 _____		S G L	15 _____		S G L	25 _____		S G L	35 _____		S G L	45 _____		S G L
6 _____		S G L	16 _____		S G L	26 _____		S G L	36 _____		S G L	46 _____		S G L
7 _____		S G L	17 _____		S G L	27 _____		S G L	37 _____		S G L	47 _____		S G L
8 _____		S G L	18 _____		S G L	28 _____		S G L	38 _____		S G L	48 _____		S G L
9 _____		S G L	19 _____		S G L	29 _____		S G L	39 _____		S G L	49 _____		S G L
10 _____		S G L	20 _____		S G L	30 _____		S G L	40 _____		S G L	50 _____		S G L

THE TRAIT QUESTIONAIRE

Below are listed a number of things characteristic of individual members of your family. Consider each item listed and encircle the number after each item which best represents your feelings toward that trait of the person according to the following scale:

1: Have Strong Positive Feelings.
Encircle a 1 for those aspects of the person about which you feel proud or happy or which give you a pleasant feeling when you think about them. For example, if you feel happy about your spouse's intelligence level, encircle the 1 after that item.

2: Have Moderate Positive Feelings.
Encircle a 2 for those aspects of the person about which you have some positive feeling but not as strong as that in category 1.

3: Have No Feeling One Way or the Other.
Encircle a 3 for those aspects of the person about which you have no feeling at all. For example, if you have no feeling at all about your spouse's artistic talent (or lack of them) encircle the 3 after that item.

4: Have Moderate Negative Feelings.
Encircle a 4 for those aspects of the person about which you have some negative feeling but not as strong as that in category 5 (see below).

5: Have Strong Negative Feelings.
Encircle a 5 for those aspects of the person which you dislike very much or which cause you to feel unhappy when you think about them. For example, if you think that your spouse is intolerant and this disturbs you when you think about it, or if you feel unhappy about this trait in your spouse, encircle the 5 after that item.

Indicate which person you are rating: ☐ Spouse ☐ Offspring

Name:_____

Sense of humor 1 2 3 4 5

Degree of independence 1 2 3 4 5

Temper 1 2 3 4 5

Ability to express self 1 2 3 4 5

Self-understanding 1 2 3 4 5

Artistic talents 1 2 3 4 5

Tolerance of other's shortcomings 1 2 3 4 5

Moods 1 2 3 4 5

Extent of general knowledge 1 2 3 4 5

Imagination 1 2 3 4 5

Degree of popularity 1 2 3 4 5

Self-confidence 1 2 3 4 5

Ability to accept criticism 1 2 3 4 5

Memory 1 2 3 4 5

Thriftiness 1 2 3 4 5

Overall personality 1 2 3 4 5

Ability to concentrate 1 2 3 4 5

Procrastination 1 2 3 4 5

Degree of self-assertiveness 1 2 3 4 5

Ability to express sympathy 1 2 3 4 5

Sensitivity to others' feelings 1 2 3 4 5

Ability to lead 1 2 3 4 5

Ability to control impulses 1 2 3 4 5

Intelligence level 1 2 3 4 5

Athletic skills 1 2 3 4 5

Present degree of happiness 1 2 3 4 5

Creativeness 1 2 3 4 5

Love life at present 1 2 3 4 5

Sex appeal 1 2 3 4 5

Skill with hands 1 2 3 4 5

Gracefulness 1 2 3 4 5

Amount that he or she worries 1 2 3 4 5

Capacity for work 1 2 3 4 5

Ability to discipline self 1 2 3 4 5

Vocabulary 1 2 3 4 5

Ability to discipline others 1 2 3 4 5

Degree of suggestibility 1 2 3 4 5

Present strength of will power 1 2 3 4 5

Ability to make decisions 1 2 3 4 5

Degree of self-consciousness 1 2 3 4 5

APPENDIX B

VARIMAX ROTATED FACTOR MATRIX

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
S1	0.09031	0.07146	0.03698	0.10861	0.77854	0.05631
S2	0.11208	-0.00041	0.10739	-0.02556	0.45545	0.27232
S3	-0.02475	0.19964	0.02270	-0.03419	0.07536	-0.02797
S4	0.20958	0.10388	-0.00982	0.09858	0.30718	0.03072
S5	0.01257	0.04067	0.05819	0.08554	0.05212	0.00472
S6	0.04679	0.00276	0.19230	-0.04104	0.57510	-0.05203
S7	0.11239	0.06542	0.17457	-0.06518	0.50639	0.27430
S8	0.17018	0.02903	0.17884	0.03525	0.08897	0.07788
S9	0.11025	0.12237	0.14808	-0.04755	0.19109	0.12908
S10	0.25730	-0.03744	0.07966	-0.03757	0.09075	0.00259
S11	-0.03065	0.28517	0.16159	0.15040	0.08660	0.27261
S12	-0.06452	0.27247	0.09920	0.18571	-0.01039	0.34901
S13	0.00504	0.80987	0.10188	0.04535	0.03534	0.03797
S14	0.11045	0.83129	-0.01389	0.03486	0.00335	0.13071
S15	0.09905	0.58154	0.19401	-0.01074	0.06784	0.08167
S16	-0.07360	0.46522	0.45425	-0.00623	0.01300	0.16450
S17	0.05811	0.38362	0.17286	0.13132	0.04345	0.07272
S18	-0.00151	0.12882	0.02711	0.17270	0.09764	0.11805
S19	0.00674	0.20154	0.12500	0.10896	0.08416	0.01437
S20	-0.10545	0.29965	0.21404	0.14110	0.06757	0.13390
S21	0.53016	0.12816	0.15540	0.11006	0.33114	0.05226
S22	0.60365	-0.00410	0.21429	-0.11771	0.10769	0.06536
S23	0.54245	0.04446	0.15445	-0.11095	0.17118	-0.10085
S24	0.55452	0.09479	0.21329	0.10274	0.03791	0.12584
S25	0.44677	0.07026	0.10720	0.17091	-0.12138	0.06298
S26	0.10585	-0.08779	0.14075	0.39122	0.44215	-0.01152
S27	0.30768	0.12574	0.08807	0.18178	0.22167	-0.00348
S28	0.17621	0.09088	0.11115	0.19545	0.00004	0.12671
S29	0.26151	0.12677	0.17286	-0.04216	-0.18138	0.27957
S30	0.34312	0.15709	0.14337	0.02302	0.03820	0.02515
S31	0.43141	0.13622	0.43381	0.06606	0.20731	0.13560
S32	0.23518	0.00795	0.62558	0.07740	0.09576	0.17793
S33	0.15420	0.13359	0.77348	0.15680	0.07395	0.05511
S34	0.16806	0.03591	0.59675	0.10818	0.11332	0.23441
S35	-0.05482	-0.00233	0.31895	0.71628	0.02767	-0.02631
S36	0.17400	0.05555	0.04548	0.71622	0.08726	0.09904
S37	0.11917	0.02161	0.14285	0.22357	0.06852	0.05358
S38	0.18112	0.07150	0.74941	0.03961	0.06434	0.01360
S39	0.01750	0.23968	0.57090	0.41638	0.10538	0.18342
S40	0.20429	-0.06436	0.10021	0.28704	0.05944	0.03015
S41	0.47515	0.06289	0.03070	0.19753	-0.04767	-0.01369
S42	0.29578	0.02069	0.10917	0.16158	0.20194	0.33985
S43	0.27728	0.27864	0.09771	0.12392	0.25668	0.53885
S44	0.10809	-0.04856	0.31507	-0.03111	-0.15427	0.66420
S45	-0.00098	0.18881	0.07384	0.06130	0.12754	0.76539
S46	0.49588	-0.00361	0.02365	0.30351	0.20549	0.01466
S47	0.30530	0.15338	-0.01822	0.47762	-0.04186	0.26963
S48	0.13909	0.08072	-0.04547	0.11271	0.01862	0.23131
S49	0.40011	0.37097	0.23459	0.39876	-0.09925	-0.03831
S50	0.65380	-0.01928	0.18551	-0.00181	0.06064	0.20738

	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10	FACTOR 11	FACTOR 12	FACTOR 13
S1	0.04960	0.26920	-0.01402	-0.01722	-0.03158	0.06068	0.06650
S2	-0.01263	0.60131	0.05309	0.02823	0.12404	-0.02018	-0.07744
S3	-0.13529	0.70779	0.00088	0.16539	-0.06583	0.15854	0.23958
S4	0.18356	0.67858	0.15876	0.01124	-0.01439	-0.05349	-0.02331
S5	0.32710	0.76853	-0.01858	0.09757	0.05176	0.18072	-0.09127
S6	-0.00261	0.14472	0.24655	0.07434	0.31321	0.22119	0.04831
S7	0.16490	0.12891	0.11169	0.19522	0.42311	0.08191	0.07120
S8	0.12054	0.18262	0.07329	0.17271	0.11423	0.73035	0.04901
S9	0.13867	0.11002	0.14919	0.18875	0.32169	0.63086	0.22171
S10	0.61176	0.19966	0.15708	0.19542	0.00735	0.24211	0.14042
S11	0.55994	0.08055	0.28319	-0.08374	0.08711	-0.05906	0.15249
S12	0.41208	0.14628	0.39519	-0.05187	-0.03948	-0.16951	0.22185
S13	0.11234	0.13321	0.13517	0.08037	-0.05548	-0.04698	-0.02238
S14	-0.00558	0.11756	0.04499	0.04915	0.08289	0.02121	0.11457
S15	0.18715	0.01427	0.33495	0.05425	-0.06972	0.20686	-0.02761
S16	0.30494	-0.03165	0.18533	0.16350	0.17648	0.07586	-0.04931
S17	0.59581	0.15846	0.00544	0.18983	0.00824	0.18110	0.10208
S18	0.28466	-0.00611	0.49467	0.08782	0.46923	0.16594	-0.07955
S19	0.05581	0.02601	0.74055	0.11311	0.10633	0.06104	-0.04543
S20	0.16488	-0.09105	0.33641	0.35329	0.11221	-0.10957	0.28698
S21	0.13133	0.00079	-0.10147	0.45798	0.06367	-0.05278	0.10502
S22	0.22479	0.21155	0.17864	0.34190	0.11206	-0.09705	-0.08243
S23	0.12379	0.00484	0.18205	-0.04383	0.56534	-0.10414	0.12336
S24	-0.02095	0.00542	-0.04252	0.19079	0.37244	0.23276	0.10023
S25	-0.25105	0.18948	0.33454	0.25342	0.22109	0.13671	0.15553
S26	0.15111	0.08023	0.27664	0.43821	-0.07462	0.08735	-0.01540
S27	0.08111	0.15063	0.00920	0.67120	0.07656	0.14532	-0.01588
S28	0.06539	0.07545	0.16708	0.73146	0.08531	0.22065	0.14004
S29	0.03544	0.20946	0.18862	0.59311	0.01998	0.11641	0.17380
S30	0.15488	0.12249	0.58445	0.04237	-0.02744	0.18114	0.29556
S31	0.32550	0.12592	0.08822	0.12895	0.01727	0.34170	0.12714
S32	0.31132	-0.01856	-0.05071	0.25426	0.14001	0.19688	-0.10742
S33	0.17331	0.07454	-0.04718	0.19588	0.13290	0.14309	-0.01244
S34	0.00558	0.12093	0.12573	-0.01066	0.37661	0.00280	0.26375
S35	0.01779	0.05042	0.08020	0.07447	0.06212	-0.00658	0.29103
S36	0.12312	0.12074	0.13462	0.19275	0.18146	-0.07831	0.12209
S37	0.10785	0.04070	0.06098	0.03064	0.01911	0.13019	0.71119
S38	-0.00608	0.07030	0.25483	0.03543	-0.06519	0.04096	0.11155
S39	-0.13632	-0.10969	0.19728	-0.05286	-0.03537	0.07881	0.06601
S40	-0.07992	-0.03284	0.04203	0.09358	0.75824	0.25081	0.02687
S41	0.07151	0.16822	0.01503	0.23811	0.26954	0.04655	0.18590
S42	0.07132	0.05234	0.41557	0.21651	0.12113	-0.03869	-0.09578
S43	0.12861	0.08978	-0.10490	0.03078	-0.21081	0.18503	0.20378
S44	0.13148	0.21977	0.08090	0.09992	0.05302	0.19992	0.13699
S45	0.04481	-0.06762	0.08637	0.13606	0.08960	0.02177	0.03430
S46	-0.03815	0.00645	0.09467	0.24387	-0.08034	0.10740	0.25529
S47	0.32449	-0.09451	0.16840	0.20465	0.09644	0.26668	-0.09055
S48	0.12829	-0.02192	-0.05244	0.38945	0.15107	0.00959	0.57307
S49	-0.02291	-0.05259	-0.06416	0.25083	0.15812	0.05132	0.07846
S50	0.03828	0.00029	0.06027	-0.01690	-0.02192	0.40655	-0.07946

REFERENCES

Adorno, T. W., Frankel-Brunswick, E., Levinson, D. J. & Sanford, R. N. The Authoritarian Personality. New York: Harper and Row, 1950.

Alanen, Y. O. The families of schizophrenic patients. In R. Cancro (Ed.) The Schizophrenic Syndrome. New York: Brunner Mazel, 1971.

Alexander, J. F. Defensive and supportive communications in normal and deviant families. Journal of Consulting and Clinical Psychology, 1973, 40, 223-231.

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Washington, D.C.: American Psychiatric Association, 1968.

Arieti, S. Interpretation of Schizophrenia. New York: Robert Bruner, 1955. Second Edition. New York: Basic Books, Inc., 1974.

Bateson, G., Jackson, D. D., Haley, J., & Weakland, J. H. Toward a theory of schizophrenia. Behavioral Science, 1956, 1, 251-264.

Burhenne, D. & Mirels, H. L. Self-disclosure in self-descriptive essays. Journal of Consulting and Clinical Psychology, 1970, 35, 409-413.

Burnham, D. L. Child parent relationships which impede differentiation and integration. In D. L. Burnham, A. I. Gladstone & R. W. Gibson, Schizophrenia and the Need Fear Dilemma. New York: International Universities Press, 1969.

Campbell, D. T. & Fiske, D. W. Convergent and discriminating validation by the multitrait-multimethod matrix. Psychological Bulletin, 1959, 56, 81-105.

Cozby, P.C. Self-disclosure: A literature review. Psychological Bulletin, 1973, 79, 73-91.

Daher, D. M. & Banikotes, P. G. Measurement of self-disclosure: Note on format and content of items. Psychological Reports, 1976, 38, 1255-1256.

Doster, J. A. & Strickland, B. R. Perceived child-rearing practices and self-disclosure patterns. Journal of Consulting and Clinical Psychology, 1969, 33, 382.

Ferreira, A. J. & Winter, W. D. Information exchange and silence in normal and abnormal families. Family Process, 1968, 7, 251-276.

Fitzgerald, M. P. Self-disclosure and expressed self-esteem, social distance, and areas of the self revealed. Journal of Psychology, 1963, 56, 405-412.

Freud, S. On the psychical mechanism of hysterical phenomen a lecture. 1893. In The Standard Edition of the Complete Psychological Works of Sigmund Freud. Vol. 3. London: Hogarth Press, 1962.

Freedman, A. M., Kaplan, H. I., & Sadock, B. J. Comprehensive Textbook of Psychiatry. Baltimore, Maryland: Williams and Wilkins Company, 1975.

Fromm, E. Man for Himself. New York: Rinehard Press, 1947.

Fromm-Reichman, F. Principles of Intensive Psychotherapy. Chicago: University of Chicago Press, 1950.

Gerard, D. L. & Siegel, J. The family background of schizophrenia. Psychiatric Quarterly, 1950, 24, 47-73.

Gilbert, S. J. Self-disclosure, intimacy and communication in families. Family Coordinator, 1976, 25, 221-31.

Goldstein, M. J. & Rodnick, E. H. The family's contribution to the etiology of schizophrenia; current status. Schizophrenia Bulletin, 1975, 14, 48-63.

Haley, J. Changing Families. New York: Grune and Stratton, 1971.

Halverson, C. F. & Shore, R. E. Self-disclosure and interpersonal functioning. Journal of Consulting and Clinical Psychology, 1969, 33, 213-217.

Higgins, J. Process-reactive schizophrenia: recent developments. In R. Cancro (Ed.), The Schizophrenic Syndrome. New York: Brunner Mazel, 1971.

Himelstein, P. & Lubin, B. Relationship of the MMPI Scale and a measure of self-disclosure in a normal population. Psychological Reports, 1966, 19, 166.

Hoover, C. F. & Franz, J. D. Siblings in the families of schizophrenics. Archives of General Psychiatry, 1972, 26, 334-342.

Horney, K. Our Inner Conflicts. New York: W. W. Norton & Co., Inc., 1945.

Jacob, T. Family interaction in disturbed and normal families: a methodological and substantive review. Psychological Bulletin, 1975, 82, 33- 65.

Jourard, S. M. Self-disclosure and other-cathexis. Journal of Abnormal and Social Psychology, 1959, 59, 428-431.

Jourard, S. M. Age trends in self-disclosure. Merrill Palmer Quaterly, 1961, 191-197. (a)

Jourard, S. M. Rorschach productivity and self-disclosure. Perceptual & Motor Skills, 1961, 13, 232. (b)

Jourard, S. M. The Transparent Self. Princeton: D. Van Nostrand, Co., Inc., 1964.

Jourard, S. M. Self-Disclosure: An Experimental Analysis of the Transparent Self. New York: John Wiley & Sons, 1971.

Jourard, S. M. & Lasakow, P. Some factors in self-disclosure. Journal of Abnormal and Social Psychology, 1958, 56, 91-98.

Jourard, S. M. and Resnick, J. L. The effect of high revealing subjects on the self-disclosure of low revealing subjects. Journal of Humanistic Psychology, 1970, 10, 84-93.

Jung, C. G. The relation between the ego and the unconscious In Collected Works, Vol. 7. Princeton: Princeton University Press, 1953.

Kramer, S. Self-disclosure and mental health: a comparison of self-disclosure in hospitalized psychiatric patients and college students as measured by a modified version of Jourard's 60 item self-disclosure questionaire. Dissertation Abstracts International, 1978, (Dec.), 39 (6-B), 2991.

Laing, R. D. & Esterson, A. Sanity, Madness, and the Family. London: Tavistock, 1964

Lamb, M. E. The Role of the Father in Child Development. New York: John Wiley & Sons, 1976.

Lidz, T., Fleck, S., & Cornelison, A. Schizophrenia and the Family. New York: International Universities Press, 1965.

Lidz, R. & Lidz, T. The family environment of schizophrenic patients. American Journal of Psychiatry. 1949, 106, 332-345.

Lombardo, J. & Fantasia, S. Relationship of self-disclosure to personality adjustment and self actualization. Journal of Clinical Psychology, 1976, 32, 765-69.

Lu, Y. C. Mother-child role relations in Schizophrenia: a comparison of schizophrenic patients with non-schizophrenic siblings. Psychiatry, 1961, 24, 133-142.

Lu, Y. C. Contractory parental expectations in schizophrenia. Archives of General Psychiatry, 1962, 6, 219-234.

Maccoby, E. E., & Jacklin, C. W. The Psychology of Sex Differences. Stanford, California: Stanford University Press, 1974.

Mahler, M. S. On child psychosis and schizophrenia: Autistic and symbiotic infantile psychosis. In The Psychoanalytic Study of the Child, 1952, 7, 286-305.

Maslach, C. Burned-out cops and their families. Psychology Today, 1979, 12, 58-62.

Maslow, A. H. Motivation and Personality. New York: Harper and Row, 1970.

Mayo, D. R. Self-disclosure and neurosis. British Journal of Social and Clinical Psychology. 1968, 7, 140-148.

Meissner, W. Sibling relations in the schizophrenic family. In R. Cancro (Ed.), The Schizophrenic Syndrome: An Annual Review. New York: Brunner/Mazel, 1971.

Mishler, E. & Waxler, N. (Eds.) Family Processes and Schizophrenia. New York: Jason Aronson, Inc., 1975. (Originally published in 1968.)

Mishler, E. G. & Waxler, N. E. Interaction in Families: An Experimental Study of Family Processes and Schizophrenia. New York: John Wiley & Son, 1968.

Mosher, L. R., Pollin, W. & Stabenau, J. R. Families with identical twins discordant for schizophrenia: some relationships between identification, thinking styles psychopathology and dominance-submissiveness. British Journal of Psychiatry, 1971, 118, 29-42.

Olsen, D. H. Empirically unbinding the double-bind: review of research and conceptual reformulation. Family Process, 1972, 11, 69-94.

Parsons, T., & Bales, R. F. Family, Socialization, and Interaction Process. New York: The Free Press, 1955.

Pederson, D. M. & Higbee, K. L. An evaluation of the equivalence and construct validity of various measures of self-disclosure. Educational & Psychological Measurement, 1968, 28, 511-523.

Pederson, D. M. & Higbee, K. L. Personality correlates of self-disclosure. Journal of Social Psychology, 1969, 78, 81-89. (a)

Pederson, D. M. & Higbee, K. L. Self-disclosure and relationship to the target person. Merrill Palmer Quarterly, 1969, 15, 213-220. (b)

Persons, R. W. & Marks, P. A. Self-disclosure with recidivists: optimum interviewer-interviewee matching. Journal of Abnormal Psychology, 1970, 76, 387-391.

Polansky, N. A. The concept of verbal accessibility. Smith College Studies in Social Work, 1965, 36, 1-46.

Pollack, M., Woerner, M. G., Goldberg, P. & Klein, D. F. Siblings of schizophrenic and nonschizophrenic psychiatric patients: Psychopathology and gender concordance. Archives of General Psychiatry, 1969, 20, 652-658.

Reisman, D. The Lonely Crowd. Garden City: Doubleday Anchor Books, 1956.

Reynolds, W. The American Father, A New Approach to Understanding Himself, His Woman, His Child. New York: Paddington Press, Ltd., 1978.

Rickers-Ovsiankina, M. A. Social Accessibility in three age groups. Psychological Reports, 1956, 2, 283-294.

Ricks, D. & Nameche, G. Symbiosis, sacrifice, and schizophrenia. Mental Hygiene, 1966, 50, 541-551.

Riskin, J. & Faunce, E. E. An evaluative review of family interaction research. Family Process, 1972, 11, 265-456.

Sathyavathi, K. Perception of parents by schizophrenics: A consideration of instrumentality-expressivity roles. Psychiatry, 1974, 37, 261-266.

Searles, H. F. Positive feelings in the relationship between the schizophrenic and his mother. In Collected Papers on Schizophrenia. New York: International Universities Press, 1965.

Shapiro, A. & Swensen, C. Patterns of self-disclosure among married couples. Journal of Counseling Psychology, 1969, 16, 179-180.

Shimkunas, A. Demand for intimate self-disclosure and pathological verbalizations in schizophrenics. Journal of Abnormal Psychology, 1972, 80, 197-205.

Sobell, L. Outpatient alcoholics give valid self-reports. Journal of Nervous and Mental Disorder, 1975, 161, 32-42.

Stanley, G. & Bownes, A. F. Self-disclosure and neuroticism. Psychological Reports, 1966, 18, 350.

Stierlin, H. Psychoanalysis and Family Therapy. New York: Jason Aronson, Inc., 1977

Sullivan, H. S. Conceptions of Modern Psychiatry. Washington, D.C.: Wm. Alanson White Psychiatric Foundation, 1947.

Taylor, D. A. The development of interpersonal relationships: social penetration processes. Journal of Social Psychology, 1968, 75, 79-90.

Voyat, G. Cognitive and social development: a new perspective. In Glick & Clarke-Stewart (Eds.), The Development of Social Understanding. New York: Gardner Press, 1978.

Watzlawich, P., Beaven, J. H., & Jackson, D. D. Pragmatics of Human Communication. London, 1967.

Wynne, L., Ryckoff, I. M., Day, J., & Hirsch, S. Pseudo-mutuality in the family relations of schizophrenics. Psychiatry, 1958, 21, 205-220.