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I am submitting herewith a dissertation written by Joshua Williams entitled "A Family with Schizophrenic Offspring: A Study of Social Interaction." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

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A FAMILY WITH SCHIZOPHRENIC OFFSPRING:

A STUDY OF SOCIAL INTERACTION

A Dissertation

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Degree

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Joshua Williams

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ABSTRACT

The purpose of this study was threefold in nature. An effort was made to partially replicate earlier work which utilized the written product analysis of the Consensus Roschach as a measure of disordered communication in families with schizophrenic offspring. An effort was also made to establish this measure's reliability across time. In addition, the question of generalization across situations was addressed.

The primary means and procedures used in data collection for this study involved the repeated administration of the Consensus Rorschach in conjunction with non-obtrusive home observations made with audio tape recordings.

The theoretical underpinnings of this study drew heavily from the seminal work of Wynne, et al., and their considerations of pseudomutuality in families with schizophrenic offspring.

Results obtained through this research provide material for a descriptive analysis of the communicational styles of both a normal family and a family with schizophrenic offspring. The schizophrenic family was observed to be lodged in a highly inflexible and maladaptive mode of interactions which appeared to yield chaos both on the structured Rorschach task and in the non-structured home environment. These behaviors closely approximated those previously labeled as pseudomutual by Wynne, et al. The normal family was seen to have a highly flexible and thus more adaptive style of interaction on the Consensus Rorschach.

This study suggests that the use of the Consensus Rorschach and naturalistic home observation either in concert with one another or independent of one another hold great promise for researchers concerned with the interactional and communicational styles of families with schizophrenic offspring.

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CHAPTER I

INTRODUCTION

Schizophrenia is one of the most widely researched but least understood of all behavioral disorders. In one review of the syndrome, Bellack (1958) tallied some seven thousand published papers on the subject in the twenty years spanning 1936 through 1956. This trend has gone unabated as schizophrenia continues to be compelling both in its behavioral manifestations and theoretical complexities. This is evidenced by the fact that more time, money and energy have been devoted to the study and treatment of schizophrenia than all other psychiatric disorders combined (Grinker, 1969).

Much has been written about the probable genesis of schizophrenia and those factors which appear to contribute towards its maintenance. Efforts have been made to demonstrate environmental factors (e.g., Fischer, 1973; Gottesman and Shields, 1972), genetic predispositions (e.g., Rosenthal, et al., 1974; Wender, et al., 1973; Winokur, et al., 1972; Gottesman and Shields, 1972, 1974; Kaplan, 1972), biochemical features (e.g., Meltzer, et al., 1976; Carlsson and Lindquist, 1963; Wyatt and Murphy, 1976), biological aspects (e.g., Hemmings, 1982; Hemmings, 1978), social explanations (e.g., Parsons, 1972; Liberman, et al., 1978), and interpersonal components (e.g., Wynne, et al., 1958; Lidz, 1958) in the etiology and pathogenesis of the range of schizophrenias.

Within the past quarter century the various types of research endeavors which evolved from individual schools of science have moved from parochial positions of exclusionary dominance to positions of synthesis. Competing hypotheses regarding the supremacy of biological, psychological, or social factors in schizophrenia have increasingly yielded to attempts to employ aspects of each research province in common or synthesized explanatory models. In this change there is general acceptance that schizophrenia is polygenic in its origin. Liem (1980) qualifies this point, stating that this trend seems to be occurring at least conceptually, if not always empirically. For example, Wynne (1968) among others, has proposed the compelling hypothesis that critical psychological and social factors may convert a genetically produced susceptibility into a symptomatic condition. In this light, theoretical positions which were once thought to be antagonistic or dichotomous (e.g., genetic versus environmental) may be viewed as complementary to one another; both appear to be necessary and causative for so-called phenotypic manifestations (Wynne, 1968).

As early as 1967, Gottesman and Shields were calling for researchers to clearly identify specific, contributing genetic factors so that their interaction with more visible (i.e., environmental) factors might be elucidated. Wynne (1981) has recently reiterated these earlier sentiments:

> Although nearly everyone agrees that genetic and environmental factors almost certainly interact, direct empirical studies that could assess such interaction effects in the same families constitute a continuing need. (Journal of Nervous and Mental Disease, 1981, Vol. 169, No. 2, pp. 82-89.)

While it is clear from the article cited above that Wynne gives credence to the prominence of genetic factors in the disorder, he nevertheless acknowledges its apparently multidetermined origins. It would appear, however, that his chief interest is the exploration of one particular etiological factor, family interactions, in the hopes that research in other schools of thought will one day permit a more exacting synthesis. The historical origins of this interest in family interaction will be elucidated below.

A Historical Vantage Point

Many early twentieth century clinicians observed clear evidence of disturbance in the family environment and psychopathology in the extended family systems of their schizophrenic patients. Clinicians reporting this phenomenon included Pollack, Malzber, and Fuller (1939) and Terry and Rennie (1938). However it was Harry Stack Sullivan (1925, 1927) who was first credited with the suggestion that there is a possible link between disturbed family relationships and the development of schizophrenia. This etiological link, as proposed by Sullivan, helped to launch a historic and ongoing search for specific family patterns which may contribute to the development of schizophrenia in a vulnerable or constitutionally predisposed family member (Falloon, et al., 1981). Sullivan and other early interpersonal theorists based their hypotheses on clinical observation. These hypotheses were subsequently amplified and expanded by practitioners of family therapy in the early 1950's (i.e., Wynne, 1958; Lidz, 1957; etc.). Such individuals attempted to go beyond the realm of conjecture

which was predicated on clinical observation. They did so through the implementation of more empirical investigations.

Prominent early studies, well known throughout the field, often focused on various aspects of familial communication and family structure. These include Lidz's schismatic and skewed families (1957, 1965), Riess's consensus-sensitive families (1967, 1968) and Wynne's studies of "pseudomutuality" and "the rubber fence" (1958). Family role was explored in terms of interactional motifs within a given family: between parents and children, and between parents. Other compelling early studies sought to highlight perceived pathological relationships between mothers and their schizophrenic offspring (Prout and White, 1950; Gerard and Siegal, 1950; Mark, 1953; Freeman and Grayson, 1955; Rodnick and Garmezy, 1957; and Tietze, 1959). The term "schizophrenogenic" mother was introduced by the noted psychoanalyst Freida Fromm-Reichman as early as 1939. The term was used to depict a narcissistic, aloof, domineering, and conflict inducing mother who was said to prompt schizophrenia in her offspring. The so-called schizophrenogenic mother has also been described as overprotective, rejecting, self-sacrificing, impervious to the feelings of others, rigid, moralistic and fearful of intimacy. Later clinical studies of mothers of schizophrenics appeared to confirm the hypothesis of the schizophrenogenic mother (Gerard and Siegal, 1950; Lidz and Lidz, 1949; Prout and White, 1950; Riechard and Tillman, 1950; and Tietze, 1959).

Research in the fifties was expanded to include the schizophrenic's father as well. Lidz (1957) identified five prominent and overlapping motifs observed in the fathers of schizophrenics: (a)

fathers of some male patients who focus their hostility toward the offspring rather than the wife, (b) fathers of female patients who are in a continual conflict with their spouse, with the brunt of their hostility leveled upon the wife, (c) fathers who have been failures in life and have evolved into nonentities in the family home, (d) fathers who have overblown self-concepts which approximate features of paranoid grandiosity (this type of individual will typically remain aloof from his children and demand adulation from his wife), and (e) fathers who remain highly passive and more resemble siblings in the family than adults and opt to accept their wives as adult authorities.

A shared feature of early considerations of schizophrenia was the conceptualization of the schizophrenic offspring as the fulcrum or focal point of distorted familial relationships. With the advent of the more sophisticated "family systems" theories of family interaction, the earlier examination of single parent-child dyads was viewed as overly simple (see for example, Minuchin, 1974). Emphasis then shifted to disturbances within the entire family system, rather than to one "identified patient."

Three major research groups evolved in the late fifties and early sixties. These groups were based at the Mental Research Institute in Palo Alto, California; at Yale University; and at The National Institute of Mental Health in Washington, D.C. All of the research employed clinical studies of families containing schizophrenic offspring. Working concurrently, but independently, the research conducted strongly suggested that these families had idiosyncratic patterns of communication which were typically manifested through unusual

styles of sharing feelings and ideas (Bateson, et al., 1956; Lidz, et al., 1958; and Wynne and Singer, 1963). Other clinical theorists (notably Bowen, 1960, 1978; Laing, 1964, 1965; Selvini Palazzoli, 1978; and Whitaker, 1978) have described family interactional style as a contributor to the development of schizophrenia. However, these theorists unfortunately have generated very little research (Dell, 1980).

A Look at Three Pioneer Research Groups

Lidz and his associates at Yale University (1957, 1965, 1973) are responsible for some of the most comprehensive work on schizophrenia to date. The basic premise of Lidz's group is that a child must have a family or a carefully structured substitute in order to develop into a psychologically healthy adult. The family is conceived of as being integral in its protective and nurturant roles in early life. It is through the family that the individual can develop into an integrated person possessing the knowledge and roles required for survival and adaptation. The family works to structure the developing child's personality and is responsible for the child's socialization and acculturation. In Lidz's framework, one or more of these family functions--nurturance, a dynamic family organization, integration into the social system, and/or transmission of the basic elements of the culture (as in language)--are not provided by the families of schizophrenics. Central to Lidz's formulation are two types of depriving family settings within the schizophrenic family: specifically, the skewed and the schismatic. In these families one or both of the parents are found to be profoundly disturbed themselves and "inject" their disturbances into the family functioning and the development of any offspring.

The skewed family is described as one in which the disturbed parent's (most often the mother's) egocentricity is not countered by her spouse. The parent fails to establish and/or maintain boundaries between her "self" and the child. Instead, the child serves to complete the parent's life. In this context the parent remains highly intrusive throughout the offspring's life. This is seen to extend into the adolescence and adulthood of the offspring. The parent remains impervious to the individual needs of either the child or other family members. Concomitant to this sort of family dynamic is the failure of the other parent to provide a constructive role model. This is the result of his inability to countermand the spouse's methods of childrearing. The child winds up maturing with the conviction that life would be impossible without his mother and concurrently that his mother would perish without him. The affects associated with this bind include fears of engulfment by the "fused" parent and an abiding urge to flee the overly protective and smothering environment. Paradoxically, any effort to move toward separation and true individuation is construed by the offspring as being synonymous with the killing of the parent.

The schismatic family is conceived by Lidz as having much more overt conflict between the two spouses. Parental interaction in this type of family would include a great deal of mutual undercutting and competition for the affections and loyalty of their children. Functioning from a position of basic insecurity the husbands appear to need constant admiration, and concurrently, to derogate the value and position of the wife and mother. While both spouses are frequently

very disturbed individuals, the father is often seen as a high functioner outside of the family. As a result of the mother's own poor development, she is incapable of providing her children with a sense of meaning and individuality.

In such families the child is effectively triangulated; attempting to placate either parent will prompt rebuff, rejection and/or guilt inducing responses from the other. In some cases the child may offer himself as a family scapegoat in an attempt to rescue the parent's marriage. In an effort to mask the parent's incompatibility the child begins to behave in ways which are designed to appear causal of the marital discord. The result of this maneuver is a failure on the child's part to invest in his own developmental needs.

Lidz's "Yale Group" found support for hypothesized idiosyncratic affective relationships and role structures in the "follow-back" study of Waring and Ricks (1965). This study examined child guidance records of youngsters who subsequently became schizophrenic and found that a significant number had parents whose marital relationships closely matched those specified by Lidz, et al. (1957).

Later in their work Lidz and his associates hypothesized that disturbed communication styles play a significant role in the development of schizophrenic functioning.

> Their dynamic theory of personality development includes analysis of the central functions of the family in guiding the integration of its children and of the significance of language in human adaptation and functioning, including the various stages of cognitive development as they are related with the stages of personality development. Language and ego functioning are seen as operating hand in hand, so that distortions of language and reasoning can lead to gross disturbance in behavior (Reynolds, 1981, p. 114).

As mentioned, another seminal focus in the early family research had to do with the so-called double-bind situation (Bateson, Jackson, Haley, and Weakland, 1956). Bateson, et al. hypothesized that the frustrating and confusing experiences of repeated "double-bind situations" are an important factor in the development of schizophrenia. The double-bind situation is noted by several dynamics. First, an individual has a high emotional investment in a close relationship with another person (typically a parent or caretaker). The intensity of this investment is such that it is extremely important to the individual to be able to comprehend communications from the other with a high degree of accuracy so that a proper response can be generated. The other person simultaneously expresses two mutually contradicting statements. The individual receiving the contradictory messages is unable to comment on them nor can he withdraw from the situation or disregard the messages.

Parents who "speak" in the "language" of double-bind rarely communicate with their children in a simple or direct manner. The double-bind may be expressed in a variety of ways: the manner which it is spoken; the behavior during its pronouncement (saying and doing different things); or by the emotions conveyed in other ways. The subject of a double-bind is helpless in that he is unable to complain about his lack of understanding nor can he seek greater clarification. The hypothesized result of this quandary is a marked difficulty in the subject's ability to order his thinking. The individual's responses may become even more obscure than the originally received communication.

Bateson, et al., (1956) offered this clinical example in their original discussion of the double-bind:

> A young man who had fairly well recovered from an acute schizophrenic episode was visited by his mother. He was glad to see her and impulsively put his arm around her shoulders whereupon she stiffened. He withdrew his arm and she asked, "Don't you love me anymore?" He then blushed and she said "Dear, you must not be so easily embarrassed and afraid of your feelings." The patient was able to stay with her only a few minutes more and following her departure he assaulted an aide . . . .
>
> Obviously this result could have been avoided if the young man had been able to say, "Mother, it is obvious that you become uncomfortable when I put my arm around you, and you have difficulty accepting a gesture of affection from me." However, the schizophrenic patient doesn't have this possibility open to him. An intense dependency in training prevents him from commenting upon his mother's behavior, though she comments on his and forces him to accept and attempt to deal with the complicated sequence. . . .
>
> The impossible dilemma thus becomes: "If I am to keep my tie to my mother I must not show her I love her, but if I do not show her that I love her then I will lose her" (pp. 258-259).

As will be discussed shortly, methodological shortcomings were common in the early family research. Efforts to replicate early work (e.g., Weakland and Fry, 1962) were often unsuccessful. In one such study, Ringuette and Kennedy had two sets of raters attempt to detect double-bind messages in written letters (1966). A set of letters written by parents to their hospitalized schizophrenic offspring and a set generated by volunteers (instructed to write fictitious offspring) were compared. The raters included several progenitors of the double-bind hypothesis, psychiatric residents, and experienced clinicians. Little agreement between the groups was found as to which letters contained double-bind messages. The correlation among

the judgements of the experts was a dismal +.19. This offered little support for the applicability of the double-bind hypothesis.

In 1958, Wynne, Ryckoff, Day and Hirsch published the seminal paper "Psuedo-mutuality in the Family Relations of Schizophrenics." The purpose of this paper was to develop a psychodynamic interpretation of schizophrenia which took into conceptual account the social organization of the family as a whole. As with Bateson and Lidz, the NIMH group headed by Wynne held that conditions of family life, particularly forms of interaction among family members, could predispose an individual to schizophrenia.

Basic to the concept of pseudo-mutuality is the assumption that a fundamental principle or requirement of human existence is movement into relation with other human beings. In other words Wynne states, "Man is inherently object related" (p. 206). Also of importance in this interpersonal formulation is the notion that the development of a personal identity is a conscious or unconscious goal for each individual. Personal identity is thought to constitute an explicit and implicit self-representation which yields continuity and coherence to experience despite a constantly changing range of inner and outer stimuli. The processes which are associated with the formation of personal identity are viewed by Wynne and his associates as ego functions through which the self is perceptually differentiated from objects.

The postulated innate need in each person to deal with both the problems of <u>relation</u> and <u>identity</u> is thought to be resolved in three fundamental solutions. These are expressed in three forms of

relatedness as labeled by Wynne: "mutuality, nonmutuality, and pseudo-mutuality." It is Wynne's contention that pseudo-mutuality is a miscarried solution which in its extreme form (an "intense and enduring form") contributes significantly towards the development of acute schizophrenic episodes. In its more moderate forms (labeled "nonmutual complimentarity"), pseudo-mutuality may be considered a fairly common experience.

Pseudo-mutuality is a form of relatedness comprised of several key components. In pseudo-mutuality each person has a primary investment in sustaining a sense of relation (much as in Bateson's formulation). The impetus for this investment may be provided by an array of possibilities (e.g., isolation from, or failure in, other relationships which resulted from personality deficits or situational difficulties). Prior experiences and present circumstances in the relation are thought to lead to a mutual effort to maintain the idea or feeling (even if in fact it is illusory) that one's behavior and expectations are in harmony with the behavior and expectations of the other person(s) in the relation. What is emphasized in this description of pseudomutuality is an overriding absorption with "fitting together" at the complete expense of the differentiation of the individuals making up the relation.

A state of pseudo-mutuality therefore denies any sense of the individual having a personal, positively valued, and meaningful identity with a developing recognition of each individual's potentialities and capacities. Divergence of expectation or affect, which is quite natural in the normal course of interpersonal relating, is disallowed

in the pseudo-mutual relationship. In the event of any such divergence, subjective tension is experienced not only as disruptive, but as threatening to the entire relationship.

> In pseudo-mutuality emotional investment is directed more toward maintaining the sense of reciprocal fulfillment of expectations than toward accurately perceiving changing expectations. Thus the new expectations are left unexplored, and the old expectations and roles, even though outgrown and inappropriate in one sense, continue to serve as the structure for the relation.
>
> . . . Without mutual perception and recognition of the identity of each person appropriate to the current life situation, the continuing relation increasingly becomes subjectively empty, barren, and stifling . . . In short, the pseudo-mutual relation involves a characteristic dilemma: divergence is perceived as leading to disruption of the relation and therefore must be avoided, but if divergence is avoided, growth of relation is impossible (Wynne, 1958, p. 207).

Wynne (1958) suggests two chief hypotheses regarding the family relations of potential schizophrenics. The first hypothesis states that "within the families of persons who later develop acute schizophrenic episodes, those relations which are openly acknowledged as acceptable have a quality of intense and enduring pseudo-mutuality" (p. 208). Secondly he hypothesized that

> . . . in the families of potential schizophrenics, the intensity and duration of pseudo-mutuality has led to the development of a particular variety of shared family mechanisms by which deviations from the family role structure are excluded from recognition or are delusionally reinterpreted. These shared mechanisms act at a primitive level in preventing the articulation and selection of any meanings that might enable the individual family member to differentiate his personal identity either within or outside of the family role structure. Those dawning perceptions and incipient communications which might lead to an articulation of divergent expectations, interests, or individuality are instead, diffuse, doubled, blurred or distorted (Wynne, 1958, p. 210).

Through the work of the three major research groups discussed above, three chief assumptions have been highlighted. The first

assumption is that the families of schizophrenics may be distinguished from other families which contain offspring having different or no psychiatric disturbances. Those characteristics which distinguish these families from others must be operable within the family system early in the life of a constitutionally weak individual (that is a potential schizophrenic) to have significant impact on his life. Finally, disordered family relationships--the ones listed herein--are necessary, but not sufficient, preconditions for the development of schizophrenia. This last premise is, of course, a cogent acknowledgment of the polygenic nature of schizophrenia.

A Return to Empirical Studies

The early studies cited above, innovative as they were, have been severely criticized for methodological limitations which greatly limited their empirical value and applicability (Fontana, 1966; Haley, 1972; Rabkin, 1965; Riskin and Faunce, 1972; Jacob, 1975). One exhaustive review of family studies conducted prior to 1960 revealed that a preponderance of relevant data was obtained through case history analyses, psychological testing, survey questionnaires, and individual psychiatric interviews (see Jacob, 1975).

Jacob (1975) notes that these earlier procedures

> . . . have been characterized as methodologically weak or inadequate and as vulnerable to major interpretive difficulties. Specifically the validity of such indirect, self-report procedures assumes that people are able and/or willing to accurately report events and feelings of the past and present and that such reports are minimally affected by forgetting, defensive distortion, or inaccurate elaboration as a justification of actions (1975, p. 33).

The exploration of the levels of congruence between reported and actual behavior is an area worthy of fuller exploration, particularly in reference to a schizophrenic population (Hess, 1970; Von Bertalanffy, 1962, 1966, 1968).

An effort has been made to circumvent this troublesome research issue concerning validity through the implementation of direct observational techniques. Family interaction data have been directly obtained and systematically coded in many new and more empirically oriented studies. These strategies of direct observation clearly require fewer assumptions and/or inferences than the self report procedures.

Given that the scientific community has yet to establish a generally accepted single explanation for the development of schizophrenia, approaches utilizing the parsimonious techniques of direct observation and description have been called for by a large majority of researchers. Though many paradigms have evolved in response to the theoretical questions posed by schizophrenia, the establishment of their empirical validity remains a necessary condition if they are to survive the test of time. (For a cogent argument of this issue, see Fontana, 1966.)

Jacob (1975) points out that direct observational studies have, for the most part, tended to measure four distinct classes of variables: dominance between parents and child and between the two parents; conflict; affect; and clarity of communication. As may be seen, the variables chosen for measurement have largely been selected from the hypotheses generated by Bateson, et al., (1956); Lidz, et al., (1967); Wynne and Singer (1963a, 1963b); and Singer and Wynne (1965). A

discussion of studies which utilize direct observational techniques in the examination of families with schizophrenics will follow. The four chief classes of variables will be elucidated as well.

Dominance

A significant incidence of insufficient parental authority or reversals of authority relationships between the parents in families with schizophrenic offspring has been hypothetically linked to the etiology of schizophrenia. This attribute is broadly referred to as "dominance." A number of studies have examined parental balances of power in intact families. There are two methods typically utilized to assess dominance: (a) judgements of factors such as yielding or accepting the view of another family member; and, (b) verbal activity counts (e.g., successful interruptions, statement lengths, taking time). Findings with measures of verbal activity rates have frequently been discordant and/or found to stand in opposition to studies utilizing measurements of dominance-submissiveness. Farina (1960) examined paternal dominance for schizophrenics with good premorbid adjustment (reactive schizophrenics) as juxtaposed with control groups. He also reported a discernible trend for maternal dominance in his poor premorbid group; however, a later attempt at replication proved fruitless (Farina and Holzberg, 1968). Cheek's studies (1964a, 1964b, and 1965) suggested an interaction with the sex of the target child. Cheek's findings contradict those of Mishler and Waxler (1968) who also analyzed their data according to the sex of the target child.

Overall, studies which rated measures of dominance-submisiveness have failed to reveal a vast number of stable intergroup trends. It has been found that indices of dominance have not revealed consistent differences between families with schizophrenic offspring and families with "normal" offspring. Verbal activity measures of dominance may in fact reflect other family processes, such as the liveliness and/or spontaneity of discussion (Goldstein and Rodnick, 1975).

Conflict

Conflict has typically been indexed (as have measures of dominance) by judgements (e.g., disagreement, agreement and conflict) and by verbal activity rates (gauges of simultaneous speech and interruptions). No significant differences were found, nor greater conflict discovered, in normal rather than schizophrenic families (Lennard, Beaulieu, and Embry, 1965; Stabenau, et al., 1965; Winter and Poindexter, 1966; Farina and Holzberg, 1968; and Mishler and Waxler, 1968).

Four studies in which researchers rated measures of conflict failed to demonstrate any similar trends (Cheek, 1964a, 1964b, 1965; Farina and Holzberg, 1968; Lennard, Beaulieu, and Embry, 1965; and Friedman, 1970). In some, the results conflicted with regard to which schizophrenic families were judged to express greater amounts of conflict (Friedman and Friedman, 1970) and less amounts of conflict (Cheek, 1964a, 1964b, 1965) than the "normal" control families. In other studies no group differences were found (see Jacob, 1975).

Affect

In most cases measurements of affect have been based upon judgements made of transcripts or audio-visual recordings. The three indices of affect usually measured are: affect intensity; positive affect; and negative affect. Regardless of the measurement used, few consistent trends have been found (Goldstein and Rodnick, 1975). One of the more complex studies (Mishler and Waxler, 1968) attempted to construct a research design with a vast variety of controls. The results obtained indicate just how hard it is to draw simple generalizations about the range of affect in families with schizophrenic offspring. The inherent complexities of such an endeavor were manifest by such findings as the fact that "less overall affect intensity" in schizophrenic families only held true when the "healthy" sibling was actually present. It was also necessary to consider the premorbid status of the patient. In this a distinction between reactive and process schizophrenia was made. Perhaps the most interesting results were in the Mishler and Waxler study were in the Mishler and Waxler were their findings concerning the expression of positive affect. Normal families were found to have a greater range of tension relievers, laugh more often, and express indirect positive affect more often than families with good premorbid schizophrenics. Persuasive evidence has not been generated, however, which indicates that families of schizophrenics have less or more negative affect than families containing offspring with other psychopathological conditions (Goldstein and Rodnick, 1975).

Clarity of Communications

Numerous studies have attempted to measure the adequacy and clarity of communication in schizophrenic families. Consistent trends have been discerned in many studies which have differed in the types of methodologies or measurements used. These trends suggest a markedly poorer clarity of communication in schizophrenic rather than normal families (Morris and Wynne, 1965; Behrens, Rosenthal and Chodoff, 1968; Ferreira and Winter, 1968; Haley, 1968; Mishler and Waxler, 1968; Friedman and Friedman, 1970).

In the Mishler and Waxler study, the greatest group divergences were found in the measure of responsiveness. This responsiveness measure indicates the degree to which family members acknowledge the content and intent of one another's communications. However, these findings were reliant upon the offspring who was present (control versus schizophrenic sibling).

Riess (1967a, 1967b, 1969) sought to distinguish family communication patterns through the use of an elaborate problem-solving task in which simple messages were passed from family member to family member. He demonstrated that families of schizophrenics could be discriminated from families of normals by their lack of sensitivity to messages arising externally from the family system. Families of schizophrenics could also be distinguished from another group, families with delinquent offspring, by their greater sensitivity to messages arising from within the family system. It is Riess' contention that manifestations of sharp differences in communication styles may be contingent upon

whether or not the family is negotiating with its own members or responding to some agent which is external to the family system (e.g., an interviewer). Most of the studies which have demonstrated communicational deviance in the families of schizophrenics (Wynne, et al., 1975) involve a parent and an examiner (Goldstein and Rodnick, 1975). Consequently, Riess issues a caveat against generalizing these findings to patterns of communication which might exist within the larger family system (1969).

Singer and Wynne have concluded that the communication problems observed in families of schizophrenics may result from the failure of the family members, especially the parents, to establish and maintain a shared focus of attention when interacting with others. This disturbed interactive style is thought to result in communications which are ambiguous, irrational and confusing and which leave both observers and participants with feelings of pointlessness and lack of meaning (Shapiro and Wild, 1977). Singer (1967) describes this process of communication as a sequence which begins with one person's idea; followed by his effort to orient the other person to the same "set" or frame of reference and to a particular focus within this "set"; and in turn followed by a sustained transaction in which the same "set" or focus of attention is shared and optimally concludes with closure around meaning and a point which is understood by both parties.

An examination of the literature concerning family interaction suggests that, of the four classes of variables listed herein, those which concern the clarity of communication hold the greatest promise for significant findings. In particular, the use of Rorschach

Psychodiagnostic Plates has proven to be highly illuminating in revealing styles of communication within family matrices. Of course, in traditional Rorschach administrations, the primary emphasis is upon the structural analysis of sequence and content in a given individual's responses. In studies of family interaction some unconventional uses for the inkblots have evolved. One such methodology which has been used with considerable success and promise is the Consensus or Family Rorschach system. As Wynne states,

> The Consensus Rorschach is in fact a group of procedures which have much in common with a considerable variety of other methods which have begun to appear in the last several years for studying families and other small groups (1967, p. 352).

The history of this Consensus or Family Rorschach system as it evolved in the field of schizophrenia research will be discussed in the following pages.

The Development of the Consensus Rorschach

Initially, family researchers sought to shift the focus of Rorschach science from the "fingerprint" notion of human character structure by which behavior with others is inferred, to the idea of sampling an actual interpersonal transaction (e.g., Singer and Wynne, 1965). Protocols were viewed as analogues of daily occurrences in which two or more individuals attempt to establish an agreed-upon view or an ambiguous "reality" (the inkblots). In this administration a subject indicated what it was that he "saw" in the blot, and offered his interpretation of its meaning to the other. The listener (in this case the examiner), in turn, asked for clarification or elaboration. This

inquiry was conducted in a standardized manner, e.g., Exner (1978), "I'm not sure I see it as you do." The examiner might comment if and when the focus on a percept and meaning were comprehended and shared. The inkblots may be viewed in this context as standardized starting points for sampling the extent to which attentional foci and meanings are selected and shared with a listener.

In their early modified use of the Rorschach, Singer and Wynne (1965) used a 41 category system of evaluating a subject's responses to the Rorschach cards. Responses were scored on their effectiveness or lack thereof in successfully communicating both the percept and foci of attention.

The intent in this method was not to measure the individual's reality testing as such. Rather, it was Singer and Wynne's intention to measure the impact of hypothetically impotent forms of communication upon the listener. This was especially useful when the test was administered to parents of psychiatric patients. The underlying issue in this study was the potential impact of impotent forms of communication upon a developing child.

The results of these studies indicated that observers could predict with statistically significant reliability where in the psychiatric nosology the offspring of a given parental dyad would most likely belong. In other words, the way in which parents focused their attention, communicated, and related to others were in sum found to be good predictors of psychiatric disorders in their offspring (Wynne and Singer, 1965).

Singer and Wynne, on the basis of these findings, concluded that families make up social subsystems which are sustained through reciprocal expectations and interactional processes. Wynne, et al. had earlier hypothesized that an inflexible style of disturbed communication (pseudo-mutuality) functions as a contributing factor in the pathogenesis of schizophrenia. In these findings their hypotheses appeared to be at least partially substantiated. The Family Rorschach was developed as a natural next step in the study of family interaction.

The Family Rorschach technique is an even more unconventional application of the inkblots than the method discussed above. As earlier noted, there are many varieties of test applications loosely entitled Consensus Rorschach. One common aspect to all of these versions, however, is the group administration of Rorschach cards to two or more individuals. In practice, it involves a careful examination of shared perceptual and cognitive processes as opposed to the traditional individualized approach. The newer procedure involves a task in which family members are asked to discuss their viewpoints about a task in which prior differences (obtained in previous individualized assessment) are not revealed to them. Group consideration and discussion is required to determine individual viewpoints and then to attempt to reach a group consensus.

The Consensus Rorschach first appeared in the professional literature in 1959, when W. H. Blanchard reported using the consensus method in a highly inferential and non-empirical manner. His project entailed the administration of group Rorschachs to delinquent male peer groups. By examining the process through which consensus was achieved, he was

able to see an analogous style of interaction among his youths on the Consensus Rorschach and in consensually agreed upon gang rapes. On the basis of these findings Blanchard was able to infer a direct correlation between homosexual impulses in gang leaders and the presence of other gang members (Cutter and Farberow, 1968).

In the early sixties other independent groups worked to devise a more empirically "correct" Family Rorschach system (e.g., Loveland, et al., 1962; Levy and Epstein, 1964). Dr. Nathene Loveland used a series of procedures she collectively called "Relation Rorschach" (1963, 1967). Emphasis was placed on the "manner" or "process" with which two or more people achieved an agreement about the meaning of Rorschach inkblots. The actual number and content of these agreements was of a secondary importance. The primary data gleaned in this methodology came from extensive tape-recordings of the testing sessions. A written inquiry was used to evaluate the extent to which the subjects truly agreed with one another about the same responses after their verbal report of an achieved consensus. Loveland's (1968) scoring placed particular emphasis on several aspects of interaction. These included the clarity and vividness of each of the speaker's verbal communications. It also emphasized the grasp of meaning and the appropriateness, creativity, sensitivity and accuracy of comprehending the assignment, one another, and the actual interpretation of the inkblot. She also examined and rated the affective stand the participants took in relation to one another as well as to the task at hand (1967).

Two basic procedures were used by Loveland (ibid.). One procedure entailed an administration of the standard individual Rorschach

prior to the Consensus Rorschach. As will be seen, this was to determine how each person "saw" the blots prior to the impact and influence of the other family members present. The other basic procedure simply entailed the group administration of the Rorschach without any prior exposure to the inkblots.

As stated, in one procedure the Family Rorschach administration was preceded by the individual administration of the traditional Rorschach for each family member. (This innovation had also been implemented by Blanchard in 1959.) In the family test administration, the mother, father, and one or more offspring were brought into a room equipped with a one-way mirror. The subjects were seated according to their own preference and then briefed as to the nature of the task at hand. They were told that the aim was to find out which responses to the stimulus cards they could agree upon. Discussion was encouraged, the examiner placed the card in the correct position and then left the room. The examiner then observed the family's behavior through a one-way mirror. Notes were made regarding the non-verbal communication, how each individual held the cards, and the locations of percepts--which were clarified during a later discussion. If the family members indicated that they were finished with either of the first two administered cards prior to a five minute time lapse and with only one response agreement, they were instructed to persist: "Try a bit longer and try to come up with a few more." The family would then ring a bell to signify the completion of each card. An assistant would return, give each of them paper and pencil, and instruct the family to individually write down each thing they had, as a group, agreed upon.

The assistant would stay in the room to preclude any comparison of notes or conversation.

Upon the completion of all ten cards, the examiner would return the written communications to each of the family members with a Rorschach location chart attached to each. The family members were then requested to locate their responses on the chart. Individual inquiry, when warranted, was also conducted at this stage.

Singer (1967) also used a somewhat more experimental "Solo Rorschach" procedure in an effort to establish how people function when they are alone and as a way of procuring individual Rorschach baselines with which to compare the Family Rorschach. This procedure was particularly useful when the family was available for only a limited time. In this procedure a group pre-briefing is administered to the entire family. The family members are then escorted to individual testing rooms for the "solo" administration of the Rorschach. Unlike the traditional test administration, subjects here are instructed to write their responses on paper. The behavior of each person is observed and all communications with the examiner in transit are noted. Once each family member has finished all ten cards in the "solo" administration, the family is reunited for the full Consensus Rorschach.

Singer used many varieties of group-administered Rorschachs. In one such application (the "Spouse Rorschach") (1968), she administered the standard individual Rorschach prior to testing a wife and husband together.

Singer has indicated that the analysis of individual Rorschach protocols most succinctly reveals the kinds of communication mechanisms

an individual (e.g., parent) uses as he tells something to a receptive, even passive listener (1968). In this method the individual reveals the style and terminology he uses and the content he is prone to think of at times in which he takes over, lectures, or instructs a child. With the examiner in a position of listener, the subject is less influenced by feedback. This lack of restraint is seen to give fuller vent to the subject's preoccupations, interests, views, and general style of phrasing ideas and the directing of his ideas.

On the other hand, the "Spouse Rorschach," described here, reveals more clearly the roles that each parent has in relation to the other spouse. The impact of these roles in their constricting or facilitating communication determines the gamut of behaviors each shows during the "Spouse Rorschach" (Singer, 1968).

Singer states,

> The Consensus Rorschach offers a standardized way of directly studying interaction within families. It has, as a special advantage, that the individual starting points at which family members begin to communicate are similar for each family member and can be directly observed. Further, the Consensus Rorschach is an interpretative transaction in which meanings are attributed to the "reality" of the Rorschach cards. Thus it can be inferred that this may parallel those repeated times throughout a child's formative years wherein parents interpret, name, label, and instruct children about the world in which they share. Further studies will help elucidate the extent to which the styles of communicating and relating shown by families during testing parallel their behavior in other situations (Singer, 1968, p. 350).

Klopfer (1968) underscores this point, stating that an interactional technique such as the Consensus Rorschach can either restrict or enhance the individual's contributions to the overall protocol. This is contingent upon the actual relationship of the subjects participating in the method. It appears that people who have constructive

interactions in general can produce an enriched protocol; those who lean towards aversive interactions in most situations will demonstrate this in the test situation as well.

Levy and Epstein (1964) reported a Consensus Rorschach procedure in which they first gave individual Rorschach administrations to family members, and then a group or Family Rorschach. They endeavored to measure the psychological functioning of the personalities of individual family members, the transactions of individual members within the family unit, and finally the relationship between the first two classes of variables. They determined that responses during the Consensus Rorschach are influenced in part by the complex transactional processes occurring within the family unit (e.g., the degree of reciprocal trust underlying family relations, individual interpretations of explicit and implicit family rules, etc.).

The authors also found that by giving the individual Rorschach first, followed by the Consensus Rorschach, they were able to observe the stability and transitions in both the individual's psychological and social functioning within the presence of the family.

One additional phenomenon of interest was noted. By juxtaposing the individual versus the family Rorschach administrations, Levy and Epstein noted a "leveling off" effect of family interaction in which maladaptive, impulse ridden expressions (which had been observed in the individual administrations) as well as "good-form" imaginative elaborations appeared to be suppressed by the family's presence.

In a similar vein, Cutter and Farberow (1968) administered both the individual and Consensus Rorschach in a serial fashion (i.e.,

repeated measures) to an individual patient. They did so over a six month period of time in various conditions. The patient was tested alone, with his friends, and with his spouse in an effort to examine the effects of differing social contexts upon the varied protocols. As would be expected, variations were found which could be attributed to the different social or interpersonal contexts. The authors viewed these differences as adaptations to variations in each respective group's conflicting expectations. These conflicting expectations were discernible in terms of "content polarities."

Rosenthal, Behrens, and Chodoff (1968), while located at the National Institute of Mental Health's St. Elizabeth's Hospital in Washington, D.C., utilized the Consensus Rorschach with low socio-economic families of Black schizophrenics and normal controls as well as Caucasian schizophrenics. Testing was conducted in the families' homes and included whichever family members were present and willing to participate. (The authors reported that natural fathers were often no longer living within the family home.) Results indicated that families of schizophrenics could be distinguished from those of normals through the careful analysis of communication patterns revealed by family members in the course of taking the Consensus Rorschach. Particularly salient in the protocols of schizophrenics' families were deficits in shared attention (focus) and meaning (Behrens, Rosenthal, and Chodoff, 1968).

Suzuki (1972), utilizing the Consensus Rorschach, graphically illustrated the disturbed interactive styles of families with schizophrenic offspring. He found that many of the seemingly agreed upon

responses to the Consensus Rorschach obtained from his schizophrenic subject families were not in actuality group responses. Typically, the opinions utilized by the subjects were those of the parents, to the exclusion of others. Parents were often seen to force responses from their children only to later ignore, disregard, or deny them. Parents were also seen to be incapable of reaching any conclusions in an independent fashion without mutual agreement. This appeared to be true whether or not the parents were intensely interdependent or were antagonistic and mistrustful of one another.

In 1975 Alanen and Kinnuen used the Consensus Rorschach in conjunction with other projective techniques when they examined the psychodynamic aspects of schizophrenic patients' own marital relationships. The Consensus Rorschach was given to the patients with their spouses in the hope that some characteristic interaction might be observed. The combined data were used to describe various aspects of their interactive style, including the spouse's ability level, initiative, and activity. The clarity of verbal expressions and the ability to receive and process the spouse's messages were also highlighted. The authors sought clues as to sexual identity as well as to the degree of disturbance in both the subject and his spouse. Levels of dominance were also measured within the marital dyad. On the basis of these data the authors were able to describe several types of marital "motifs" present in male patients with their wives, and female patients with their husbands.

Researchers who have utilized various forms of the Consensus Rorschach have listed a range of its positive attributes. The Consensus Rorschach may be standardized and administered to a wide range

of families. Much like the original Rorschach administration it finds application and suitability for use across socio-economic strata, pathologies, cultures, educational levels, and intelligence. Additional reports using this approach have been made by Wynne (1970); Mosher, et al., (1972); Bos (1974); Shapiro and Wild (1976); Herman and Jones (1976); Wild, Shapiro and Abelin (1977); Singer, Wynne and Toohey (1978); and Loeb, Horst, and Horton (1980). Most researchers using this technique concur that interest in the task itself is maintained at a high level across a wide range of families tested. Loveland (1963) stated this succinctly,

> . . . even though looking at inkblots is not an everyday venture, once a person has seen his own interpretation, even the most dilapidated schizophrenics seem to be motivated, almost eagerly so, to talk about their interpretations. It may be that its almost game like essence, and lack of "test" IQ or "task" quality makes it an appealing and inviting situation (p. 189).

As a result of the unstructured nature of the testing material, a broad, representative sample of the following may be provided in the family's own jargon: what sort of things they can agree upon; what is construed as being funny; what topics are too affectively charged to negotiate (and therefore need to be rejected); the defenses utilized to avoid dealing with certain affects and/or contents; interpersonal maneuvering; how members of the family influence one another, and so on.

> Among the special advantages of the Consensus Rorschach is that the inkblots are specific and identifiable, can be located in space, unlike purely verbal stimuli, and yet are relatively unstructured so that a diversity of interpretations ordinarily are made with little implication that one answer is "right" and another "wrong." Lively interchange about Rorschach responses can take place between persons

> of widely differing intelligence levels, without intelligence in itself becoming a decisive factor in the way the transaction unfolds. Also most S's become readily involved in a discussion of their responses and rarely become bored or disturbed by the task itself (Wynne, 1968, p. 354).

The projective nature of the stimulus cards necessitates that the family structure their responses in their own characteristic style. It is the family, more than the test, which sets the limits.

Of particular interest to those studying the impact of family interactions upon the pathogenesis of schizophrenia is the fact that family members are ostensibly explaining the "reality" of the cards to one another. As stated earlier, this is seen as analogous to the transactions of the family unit during the formative years of the children's lives. During these early years, parents are essentially cast in the role of executive egos or interpreters of reality. In the context of the testing situation, the family's full range of communication styles, verbal as well as nonverbal, are highlighted, as well as their failures to effect successful communication.

While inferences may be drawn from an individual's protocol regarding the probable nature of his interactive communication style, within the family milieu the validity of these inferences is difficult to assess. However, given the interactive nature of the Consensus Rorschach, both direct observation of actual transactions and inferential analysis are possible. Wynne and Singer have repeatedly expressed a strong interest in the perceptions which underlie family communications (e.g., 1967). In particular, they are eager to establish the perceptual starting point from which schizophrenics and their families instigate their communication. With the Consensus Rorschach

procedure, this perceptual starting point may be specifically located, either during the transaction or during the subsequent inquiry.

Families are invaribly faced with the task of resolving the differences of opinion which surface while viewing the Rorschach cards. In this context it becomes possible to assess how a family begins and then maintains a particular style in negotiating the assigned task of reaching a group consensus.

Because there are no "correct" responses to the Rorschach, idiosyncratic individual responses have a higher chance of being considered by the family. This, of course, would not necessarily be the case in a task involving socially conditioned material, or more structured problems. In the latter case the more self assured, verbal, dominant or intelligent individual family member might declare a position and expect the others to "toe the party line."

Room for divergence or disagreement is provided in the written component of the Consensus Rorschach. This is useful if or when the individual covertly disagrees, or fails to understand what the family was discussing, or where a response was located. It is also convenient in that it allows for an accurate and speedy measurement of actual agreement and the clarity of family communication. The analysis of handwriting samples also becomes a possible source of data when this procedure is utilized.

The Family or Consensus Rorschach also has provided unique means of assessing the relationships of family members towards one another. A much greater length of time is often required in traditional family therapies before the ways in which family members view one another

become clear as not all members of the family are as quickly drawn into the family dialogue.

Conversely, a disadvantage of the Consensus Rorschach method is the seemingly overwhelming abundance of behavioral samples which are elicited. The gathering and interpretation of the data is heavily reliant upon the skill of the interpreter who must possess before the ways in which family members view one another become clear as an alert, educated and sensitive eye and is thus rather subjective in nature. Most designs also required the troublesome use of specially designed and expensive observation rooms.

There has been some recent discussion in the literature regarding the need to standardize the Consensus Rorschach, but to date little has been done in this pursuit. Many variations still exist in the administration and scoring of the method. These variations include the degree of participation for the test administrators; whether or not an inquiry is used; how many cards are administered in a sitting; how many agreements are requested; whether cards are presented as repeat measures; in what order are cards presented; who is asked to indicate the achievement of a consensus; how long is group discussion allowed to proceed; the unit of analysis of recorded data; and so on. This diversity in styles of administration, scoring systems, and interpretation may be symptomatic of the lack of a clear paradigm in this realm of psychological research. It may also be symptomatic of the rather fragmented population this particular research device was created to study.

A small, but potentially useful, trend has emerged which marks a shift away from the analysis of the processes required to achieve a consensus to a product analysis of the group's written responses (Bauman, 1967; Shapiro and Wild, 1976). In such an effort, Shapiro and Wild (1976) implemented the Consensus Rorschach technique with families of 36 male schizophrenics, 13 psychiatrically hospitalized non-schizophrenic controls, and 38 normal controls with the aim of discerning the families of schizophrenics from the other two groups of families. Unlike the earlier methods (e.g., Loveland, et al., 1963, 1968) the focus of this study was upon the actual written response, or product, instead of the earlier concern for the interpersonal process of reaching agreement. A system to score the responses predicated upon the degree of shared meaning achieved by the family was developed (Shapiro and Wild, 1976). Their findings significantly differentiated the three groups. A significantly greater number of families of schizophrenics had "low" scores which indicated a lack of shared meaning than did the families of hospitalized and normal controls. Socioeconomic factors also appeared to have some impact upon the findings. In the schizophrenic group more upper class families had low scores than lower class families, whereas in the normal control group there was a trend in the oppostie direction. They concluded that the difficulties in sharing a focus of attention, frequently seen in the families of schizophrenics and described as pseudo-mutuality by Wynne, et al. (1958) are indeed reflected in the quality of their written responses to the Consensus Rorschach.

The Consensus Rorschach system devised by Wild and Shapiro may prove to be one of great help in the evaluation of families in clinical settings where the more time consuming and expensive recording, transcribing, and scoring of Loveland's (1963) system for measuring levels of familial interaction is not always feasible. There exists, however, an inherent danger in using solely a "product-analysis" of written group responses to the Rorschach cards. By drawing inferences on the "writing behavior" of subjects the researcher may be guilty of reification and thus be taking a quantum step back to the less empirical type of research cited earlier. Therefore, the most important task at present is to empirically measure the validity and reliability of this important research method. This might best be achieved by combining research methods such as the Consensus Rorschach with other direct observational techniques for more empirical and correlational data (Jacob, 1975).

Another burgeoning field of research in human behavior and dynamics is that of behavioral ecology. A highly plausible and feasible hybrid form of research might include elements of both the Consensus Rorschach and the behavioral ecologist's chief tool, naturalistic observation. In the next section of this paper the methodological issues in naturalistic observation (with particular emphasis on electronic surveillance and recording) are briefly considered.

Naturalistic Observation

The use of naturalistic observation as a scientific method has long been an accepted practice among various branches of the scientific community such as biology, sociology, anthropology, and zoology.

The application of naturalistic observation to the study of human behavior is in comparison to the other schools, a relatively new enterprise. Largely pioneered by such noted behavioral ecologists as Roger Barker (e.g., 1955, 1965), this methodological innovation has greatly contributed to our understanding of behavior over time, across situations and persons. Other methods, however useful, offer us admittedly circumscribed samples of human behavior from which our ability to generalize across the dimensions listed above is often questionable.

> The very ordering of our daily existence, even in the most simply organized societies, naturally precludes intensive observation of one individual by another. A child or an adolescent has access only to a very limited part of the parent's total daily experiences; an employer may "know" his employees in a very limited context even after years of association; a husband or wife may claim a broader range of exposure, but for either of them half of every working day is usually beyond the pale of direct observation. Even the five-day-a-week psychoanalyst, the most intensive and trained accumulator of reasonably systematic behavior records on the current scene, has only a second-hand access to the material his patient subject can recall and is himself witness to only 50-minute samples of predominantly reflective rather than transactional behavior. For all of us, time segments, place boundaries, role definitions, circumscribe each episode of daily life so that we pass successively out of the range of scrutiny of one observer and into that of the next while remaining forever a partial stranger to them all (Soskin and John, 1963, pp. 228-229).

Naturalistic observation stands as a promising solution to the situational specificity of our existing sampling methods. However, a review of current literature (Johnson and Bolstad, 1973) leaves the reader with the impression that "people watching" is not a "cut and dry," or particularly simple, procedure. Various complexities appear to be inherent in the method and appear to develop as a result of several primary factors. The first factor is that people are both

physically and psychologically sensitive to being observed. Reactivity is defined in terms of measurement procedures which influence and thereby modify the behavior of the subject (Webb, 1966). Weick (1968) describes reactivity as "interference or the intrusiveness of the observer himself upon the behavior being observed." Situations which are particularly sensitive in terms of observer effects are unlikely to be generalizable to situations in which such effects are not present. Another factor is that, in converse fashion to man's sensitivity to being observed, he is also not a particularly great observer.

To date, there have been a surprisingly small number of systematic, carefully controlled studies designed to measure alterations in behavior which are induced by observational techniques that invade privacy (Purcell and Brady, 1966). Bellack and Smith (1956) studied the effects of observation on psychoanalysis. They reported no interference with the therapeutic process. Roose (1960), however, felt that the recording of sessions contaminated the proceedings to the point where the sessions could no longer be considered psychoanalytic therapy. Sternberg, Chapman, and Shakow (1958) evaluated the effects of filming the psychotherapeutic process and reported that "patients and therapists tend to adapt with time to intrusions by objective recording devices." Haggard, Hiken and Isaacs (1965) in a comprehensive study basically confirmed and expanded the findings of Sternberg, Chapman, and Shakow. Patients and therapists were seen to adapt to treatment conducted in a research framework. Patients were found to have adapted more readily than therapists. Most importantly, however, the essential characteristics of psychoanalytic therapy were retained.

Less extensively examined than the effects of observational techniques upon behavior in laboratories and treatment centers have been the effects of observation in field situations. This phenomena has largely been researched by Barker (1955) who, for example, concluded that "most children get used to the presence of onlookers." Deutch (1949) found that over a period of three weeks, members of small groups lost almost all awareness of the presence of observers. Polansky, Lippitt, and Redl (1949) suggested that an observer assigned an ambiguous role may serve a projective function and have an increasing impact upon the behavior of those being observed. Litman, et al., (1957) found evidence for reactive effects due to the presence of an observer. However, in most cases the maximum adaptation period for habituation to the observer's presence was about six hours. Other studies (Bechtel, 1967; White, 1972; Patterson and Harris, 1968; Roberts and Renzaglia, 1965) have been conducted which purport to show significant reactivity to observation.

Accepting for the time being that reactivity to being observed in natural settings does occur, even if only to a small degree, the task at hand is to identify the sources of interference. Several such confounding variables, as they may serve to limit the utility of naturalistic observations, are briefly enumerated below.

The continuous presence of an observer may become a stimulus which inhibits or prompts certain behaviors or changes others. The presence of an observer as a third party may influence the behavior of people within the subject's interpersonal spheres of contact and thereby influence social interactions. Human interactions tend to

be too rapid to record via manual transcription (handwriting). As a result, observers have been found to have inadvertently condensed their reports of behaviors, missed others, and overlooked inconsistencies. Further, it becomes physically difficult if not impossible to write while "on the run" when the subject moves from spot to spot. It remains physically impossible for even the most highly trained observers to sustain the "set" of an observer/recorder over a sixteen hour day without breaks to attend to one's own needs. This particular problem is compounded even further when the observation period is extended over a period of days or weeks. Rotating observers increases the number of people with whom the subject must share his privacy. In addition the constant "changing of the guard" may serve as an unwanted and recurrent reminder of being under surveillance (Soskin and John, 1963).

Recent technological innovations have enabled researchers to begin using audio-visual monitoring devices in vivo. By utilizing the recording devices, it has become possible to "explore true scientific terra incognita" (Barker, 1972) with greatly reduced restrictions and influences in both the observers and the subjects. The use of transmitting devices or recording units allows for greater access to the deeper and more private recesses of people's lives. Such devices can, as compared to human observers, function in a more pervasive, but theoretically less obtrusive fashion. Further, the use of a transmitter or recording device effectively counters the physical difficulties in naturalistic observation listed above.

Ethical constraints, including informed consent, and rights to privacy appropriately preclude the use of completely surreptitious recordings. As stated earlier, many in the field tend to agree that human and/or electronic observers have only a small or barely discernible influence upon behavior of subjects. Yet very few empirical considerations or studies of the latter methodological approach to studying human behavior have been conducted (Patterson and Harris, 1968). A brief review and discussion of several of these examinations of subject reactivity to audio/visual surveillance follows.

In 1963 Soskin and John began a behavioral analysis of "spontaneous talk." They constructed a radio transmitter which was small enough to be worn continually for fourteen to sixteen hours a day and sensitive enough to pick up both the subject and the people speaking to him. In part, it was their intention to solve several methodological problems. They wished to determine if subjects could accept and habituate to the continuous monitoring of every aspect of their public and private lives. They sought to discover if the conditions imposed either by the limitations of their apparatus or by the psychological needs of their subjects would vitiate the utility of such records for the study of longer sequences of behavior. It was Soskin and John's contention that the use of small radio transmitter would allow them to obtain behavioral data which was accurate, detailed and obtained in uncontrolled social situations.

The authors selected two married couples for their study. These two couples were chosen for their willingness and apparent ability to "tolerate this kind of experience." In exchange for their

participation each couple was given a free week-long vacation at a summer resort wherein they were observed. The subjects were required to carry the transmitters which were $1\frac{1}{2}'' \times 2\frac{1}{2}'' \times 5''$ in overall dimension with a foot long antenna protruding from the upper end. The unit weighed approximately three pounds and was carried by means of a shoulder strap. The authors conclude that

> . . . self consciousness seems to vary inversely with the degree of one's involvement with his environment. We have all managed some time to forget completely, for example the visible rip in front of our garment once we become engrossed in conversation, and, as wearers of eyeglasses, or hearing aids, or dental bridges, will attest one comes to terms rather quickly with a new and ever present appurtenance (p. 285).

They report that the transcripts obtained in the course of their study did not truly indicate how much and under what circumstances behavior was influenced by consciousness of the transmitter. Both sets of subjects in debriefing stated that their awareness of the transmitters seemed to wax and wane. Both couples also stated that their self-consciousness seemed to diminish with the passage of time. Later, when protocols in this study were examined for the frequency of subject's comments about being observed or listened to, it was discovered that such references dwindled to a zero level either during the first or second day or recording. However, this zero reference level may not in fact indicate that the subjects were no longer aware of and/or reacting to the recording devices. It only signifies a reduction in conversation pertaining to the intrusion upon their privacy (Johnson and Bolstad, 1974).

In essence this pilot study by Soskin and John (1963) poses several problems in generalization. No data was generated regarding

how the couple's behavior among strangers, in unfamiliar settings, with no work responsibilities, might be different from their everyday behavior among friends, in the work-place, and so on. No effort was made to develop a quantitative measure of adaptation or to even evaluate adaptation in any systematic fashion. Nonetheless, Soskin and John were fairly convinced that their subjects did accept and habituate to the continuous monitoring of their public and private lives.

In addition to the limitations cited by the authors, other fairly obvious problems would appear to exist with this methodology. The cumbersome design of their radio transmitter greatly reduces its utility for in vivo studies of less cooperative or less functional individuals or groups. Data is also, in all probability, lost in the absence of recordings of facial expressions and gestures. However, as the authors indicated, an overwhelmingly large part of information is conveyed via verbal messages. The loss of facial and gestural information need not constitute a total negation for the utility of audio recordings.

Perhaps the most significant finding in this study was the determination that their subjects' public behaviors deviated significantly from their more private interactions.

Purcell and Brady (1966) sought to expand upon Soskin and John's earlier work by attempting to discover if an individual who is aware that his verbal behavior is being monitored in any way alters his speech in reaction to the surveillance. Subjects for this study were male and female adolescents (ages 12 through 16) who wore radio transmitters on their belt loops. Data was collected over a period

of ten days and blindly analyzed along a four point scale (0 = no attention to the transmitter; 3 = preoccupation with the transmitter). Subjective reports were also solicited, as were the observations of adult supervisors. Consistent with expectations, the researchers found the largest drop in subject's attention to the transmitters between the first and third day. All of the subjects, in interviews, reported that by day three the transmitters were forgotten. The adult supervisors (houseparents) were unable to distinguish, at better than a chance level, between children who wore activated transmitters and those wearing "dummy" non-functional devices. (The children wearing either type of device, however, were told in advance.) The authors concluded that children behave naturally while wearing radio transmitters as judged by three different indexes: direct measure of attention to transmitter; subjective reports; observations of others.

In 1971 Bernal, Gibson, Williams and Pesses suggested an alternative to either the use of human observers or radio transmitters: the use of an audio tape-recorder. However, even in citing the "cost-benefits" of tape recording, they described potential difficulties in its use. Among the limiting factors in the use of audio tape recording is the obvious difficulty in the indefinite operation of a tape device without a change in tapes. Frequent tape changes in turn serve to increase the visibility of the unit and the process of observation. Additionally, the subject might have an awareness of when the unit was or was not in operation, creating an inadvertent observer effect. The solution posed by the authors was the installation of a timing device which operated the tape recorder at specified times of the day. They

further described an easily constructed device for timed tape recordings and compared its use with data gleaned with a human observer.

In their study, the authors measured the frequency of a mother's commands to her child in two conditions. The first condition was with an observer and a tape recorder present. The second condition was with only a tape recorder present. Regardless of the condition, an assistant collected and changed the tapes every weekday. A comparison was made of the data obtained by the observer against the tape recording for different times, as well as data obtained by the observer against the tape recording for the same times.

It was found that the data collected with the tape recorder varied as the result of three chance occurrences: absence of the subject from the home; unintelligibility of speech in the recording; and/or equipment malfunction. Nonetheless the authors found a marked relationship between the observer and the recorder data. An examination of the observer data for six weeks prior to the introduction of the tape recorder suggested that the introduction of the recorder in the home had no significant effect upon the observer rates. Unfortunately, an A-B-A-B (subsequent removal and reintroduction of the recorder) design was not conducted in an effort to empirically substantiate this suggestion, because of reported time constraints.

During the condition of simultaneous data collection a high rate of agreement and degree of relationship was discerned. However, the measurements of the recordings were found to be a less sensitive method of obtaining command measurements. This is readily comprehended in light of the observer's direct access to the additional visual and gestural (nonverbal) cues.

The authors concluded that the successful use of a recording device such as theirs is contingent upon family willingness to be monitored and the degree of trust in the family that the investigators will abide in all the conditions regarding the time and use of the recordings.

Johnson and Bolstad (1975) also studied reactivity to home observation under two conditions. Their study sought to find whether audio-recording procedures used alone would produce less reactive, or significantly different, data from those gleaned with an observer present. The study juxtaposed the "in-home" behaviors of parents and children as recorded by an audiotape recorder under two conditions: with an observer present, and with an observer absent. The assumption in this study was that any differences perceived between the two conditions would be reflective of the subject's differential reactivity.

The results of this study indicated no significant main effects or interactions between the two conditions. In other words, no evidence was found which suggested any differential reactivity to the two observational conditions. Additionally, no evidence for adaptation to the observational procedures was discovered. Unfortunately several design features cast some doubt as to the validity of this study. For example, all the family members were aware of the exact time at which the recordings were being made. The parents were responsible for activating the recorders and all family members were restricted to one room.

As others (e.g., White, 1972) have concluded, the presence or absence of reactivity or observer effects appears to be highly contingent upon several factors. These include: the setting employed;

the intrusiveness of the observational technique; the research paradigm employed and the dependent variable examined. Most of the studies to date which have sought to establish the direct impact of audio or video recording devices have failed to produce conclusive evidence to support any position. They have, however, helped to generate methodological improvements and refinements. Most of these refinements have been applied in an effort to upgrade the quality of recordings and to reduce the obtrusiveness of the devices utilized. The benefits of electronic recording devices in naturalistic observation appear, however, to far outweigh any potentially confounding variables which might be evinced through their use.

Summary

The present study attempts to validate the use of the Consensus Rorschach product analysis method as a research tool for the study of schizophrenia, particularly in the diagnosis of family types.

Information gathered in this study may be of use in addressing questions regarding the applicability of the Consensus Rorschach. One key question addressed regards the ways in which interactions on the Consensus Rorschach parallel actual in vivo family relations.

Additionally, in an effort to resolve some of the questions regarding the validity of the Consensus Rorschach technique, the current study administered the technique repeatedly over time. The results of these repeated testings are compared with behaviors observed in the subject's home over time. Attempts are made to determine if there are possible behavioral correlates between test responses and in vivo interactions of family members.

Behaviors noted in the past through the use of direct observational techniques and those behaviors observed within the context of family therapies, both of which have been considered specific to families with schizophrenic offspring, were sought in the natural home setting.

Based on the large body of research cited herein which describes the interactional styles of families with schizophrenic offspring, it was anticipated that difficulties would be observed in the attainment of closure around specific ideas in home observation by conversations which appear to end prematurely. Statements were expected which falsely implied that an understanding had been reached between the family members involved. Disruptive behaviors were also expected which would functionally serve to divert attention from the extant task or activity. In this disruption, a vacillation might have been seen between the subject's attention to the shared activity and the relationship with the other(s) involved. Peculiar language and idiosyncratic forms of logic were further expected. Misapplications of words, sentences, and logic which might interfere with the listener's ability to give attention to, or ascribe meaning to, the ideas or percepts that the speaker had in mind were also anticipated (Wynne, 1968).

From the current study, more detailed information will be gathered about the nature of intrafamilial communication in families with schizophrenic offspring. This more exacting information may contribute to a fuller understanding of familial efforts to achieve clarity and agreement in their interactions. Attempts are made to assess family triads over time to supplement previous studies which have

focused on families in single test situations. These assessments are compared with the transcripts of interactions generated through the use of home observations conducted with a non-obtrusive tape recording unit.

Given this unique and in-depth information concerning the interactions of families with schizophrenic offspring, it should be possible to generate additional hypotheses about communicational deviance as it may contribute to the development of schizophrenia in a constitutionally predisposed family member.

CHAPTER II

METHOD

In addition to an assessment of test validity for the Consensus Rorschach Product Analysis Method this study explores the possibility of using the product analysis of the Consensus Rorschach in conjunction with unobtrusive home observation. This combination of research techniques may be useful in effectively distinguishing families of schizophrenics from those of controls or non-schizophrenic psychiatric patients. The prevailing assumption in this study is that the blurred and confusing ways in which families of schizophrenics communicate will be reflected in the written products of the Consensus Rorschach created by the subject family and literally observed within the family interactions in the home environment. Thus, the written responses and location charts as well as transcripts of tape recordings in the family home will constitute the data for this study.

Subjects

As this study was largely descriptive in nature, a small "N" of two families was chosen: one family of a schizophrenic previously hospitalized at a state hospital in the Baltimore area, and one control family with no history of psychiatric hospitalization. The term "family" is used here to refer to the individual triads--mother, father, and son (with the schizophrenic's family) and mother, father, and daughter (with the comparison family)--who took part in this study. The

family with a schizophrenic offspring (The Larsons) had a total of nine children of whom seven were still living. The comparison family (The Thurbers) also had seven living children. The son in the Larson family had an established, hospital diagnosis of schizophrenia. Diagnosis was checked through an examination of mental health center records, and further assessed through the administration of the Whitaker WIST for both families. Families were matched on family size, offsprings' birth rank, religion, and approximately on socioeconomic status.

Earlier efforts had been made to work with several other families containing schizophrenic offspring. Included in this group was one family with a matched schizophrenic daughter. A pattern of attrition and non-cooperation, common in research studies such as this, contributed to the ultimate selection of the two families studied. Hence offspring were not matched for gender. (For a cogent examination and discussion of sampling difficulties in the study of families and schizophrenia see Wild, Shapiro and Abelin, 1974).

Procedures

Families were seen for 12 two-hour sessions. Sessions were scheduled approximately one week apart. During these sessions the family was seated together (typically around their kitchen table) and given the Consensus Rorschach. Nine Rorschach cards were administered over the course of the first three weeks (three cards per session) and twenty-one Holtzman inkblot cards were administered over the course of the next seven weeks. During the final two weeks of testing the first six cards of the Rorschach inkblots were administered as a repeat measure. Families were instructed as follows:

> For each card we would like you as a family to find one thing it could look like on which you can all agree. When you have decided on one thing it looks like, please tell me (the examiner) and I will instruct you further.

After giving the instructions, the examiner sat with the family while they discussed the blot. Efforts were made to avoid any form of interaction with the family. (Eye contact and discussion were avoided.)

When the family indicated that they had reached agreement on a card, the examiner removed the card and gave each person a large index card with a small reproduction of the inkblot affixed to it. Family members were instructed to write down the response they had just agreed upon and to circle it on the location chart, labeling any parts which would help the examiner to see the blot as they did. The family was asked not to discuss the response with one another as they were writing it down.

Concurrent with the administration of the Consensus Rorschach with the Larson family, nonobtrusive tape recordings were implemented in their home. The subjects' consent for audio recording was secured well in advance and they were aware of its presence in the home. (See Informed Consent Form, Appendix A.) A device for automatic audio tape recording was utilized to gather discreet samplings of family interaction in the home environment (see Bernal, 1971). The tape recorder's timer was set to activate the apparatus for random, ten minute periods during the family's evening hours. It was anticipated that these would be the most likely times for high levels of interaction (e.g., dinner time). Tapes were changed at the time of each sitting for the Consensus Rorschach. The microphone was placed strategically between the living

room and kitchen, in an effort to pick up a greater number of potential interactions. The tape recorder and timing mechanism were secured in a white wooden box which had a hasp and padlock on it to guard against tampering. A standard type house timer was also inside the box. If, for any reason, the house current was interrupted (e.g., someone pulled out the plug) the house timer would register this lapse. Study participants did not know the specific times that the recording unit was activated. However, they did know that the unit was not always on. The tapes were later reviewed, transcribed, and examined for possible recurring family interactions enumerated in the introduction to this section.

Scoring the Consensus Rorschach

For each Rorschach or Holtzman card, the written responses and location charts were photocopied onto a single sheet of paper for scoring. There was no identifying information on this material.

Using a scoring manual devised by Shapiro and Wild (1977) a score was assigned to each set of family responses. Scores were predicated upon the degree of consensus, clarity, and complexity achieved. In this scoring system, both the responses and labeling on the location charts were compared. Each set of responses to a given inkblot card was given a score ranging from 1 to 9. A low score (e.g., 1 through 3) is indicative of an overall family response which contains vagueness, clear disagreement, or difficulty in determining if agreement had ever, in fact, been reached. The richness and complexity of the shared responses were viewed, in part, as indicative of the attainment of lucid and detailed

consensus. Thus, the family responses were scored in an ascending manner: from vague, amorphous responses to well integrated, complex and clear responses.

Following the guidelines established by Shapiro and Wild (1977), (see Appending B) each set of responses was first examined to see if it could be scored: (1) extreme vagueness; (2) qualification; or (3) disagreement. Responses which were so vague as to render it impossible to discern if a real consensus had been reached (e.g., "figures," "clouds," "smoke") were given a score of 1. Responses were given a score of 2 if at least two of the three family members amended the family consensus by qualifying the response in some way, such as adding qualifiers (e.g., "maybe," "possibly"). A 2 was also scored if the response was in question form or if responsibility for the response was deferred to other sources (e.g., "they say it looks like a bat"). Another example of a response scored at level 2 might be: "Maybe a dog. They thought so and so I agreed." When family members produced divergent responses or indicated differing locations for their responses on the location charts, their combined responses were given the score of 3. Scores of 1, 2, and 3 indicate an inability to achieve a firm commitment to a shared interpretation of the blot.

Scores of 4-6 are based primarily on the labeling of the location charts. Responses which were not socrable in levels 1 through 3 but had location charts which were either unlabeled or inadequately labeled (less than two parts labeled by each family member) fell into this range. The original authors of the scoring manual viewed labeling as a way of specifying and detailing the responses agreed upon

which highlighted consensus or its absence. An absence of labeling makes it difficult to estimate the actual degree of agreement on the response. No labeling may reflect avoidance of commitment. For example if all family members wrote down "pair of boots" but did not label, it was not possible to determine if they all saw the pair of boots on the same part of the card and in the same way.

Cards scored at levels 7 through 9 are classified on the basis of the specificity, elaboration, integration, and creativity of the response. Features used at this level include whether the response is popular, general, or specific (e.g., "animal" vs. "dragonfly"), and the level of complexity and elaboration of the response (i.e., movement, integration of several percepts into a complex whole, amount of detail) is also considered. Higher scores are given for incrementally more specific and complex responses.

Protocols from families which were not included in this study were used for the purposes of training scorers to use the Shapiro and Wild manual. Scorers included advanced graduate students in clinical psychology, and practicing clinical psychologists. All had been previously well trained in the use of traditional Rorschach techniques for administration and scoring. Linda N. Shapiro, one of the original innovators of the scoring technique, was also consulted regarding the scoring manual and its use.

The G-test is a relatively new statistical test for significant levels of variance. Similar to the chi-square, it is a more robust measure in that it incorporates the use of natural logarithms for each score's frequency. The results obtained are interpreted the same way

that scores achieved on the chi-square are. This statistical method was also implemented in an effort to determine how consistent each family's response set or style of interacting was over time. For purposes of statistical comparison of the two families a median-test was conducted comparing the median scores assigned to each family's responses to the individual inkblots against the grand median of all scores.

To obtain specific agreement levels among raters for each set of responses to the specific inkblots (by each family) a Kappa statistic was computed. K statistics were also obtained to test agreement rates over time.

Tape transcripts were cross-checked by two observers to assure for accuracy.

CHAPTER III

RESULTS

The results section is divided into three subsections. The first section deals exclusively with the results of the twelve administrations of the Consensus Rorschach. Statistical interpretations regarding (a) overall agreement in the scores of the four raters; (b) specific agreement rates, on an item for item basis, for the four raters; changes in agreement rates as a function of time; (d) the variability of family responses or communicational styles over time; and (e) differences between the overall ratings for each family's communication scores (obtained with the Consensus Rorschach).

Descriptive results are presented regarding the familial styles as revealed in their written responses and behavioral observations taken during testing sessions.

The second subsection is comprised of a narrative description of home observations made through the use of non-obtrusive audio tape recordings. Included in this subsection are descriptions of the observations, a transcripted excerpt of one tape segment, and a brief report of methodological difficulties encountered.

The final subsection deals with the comparison of the findings of each of the two measures used in the study and described above.

Consensus Rorschach

Overall Constancy of Raters

Tables were constructed for each family which juxtaposed raters versus the rankings of subject families' responses. Extreme scores with limited frequencies were collapsed to eliminate zero cells. A G-test was conducted for each family.

The G-test for the Thurber family (normal) was not significant. This indicates that there was no significant heterogeneity among the scores given by the various raters.

The G-test for the Larsen family (with schizophrenic offspring) was found to be significant at .005 level. Inspection of the table reveals that for this particular family one rater, Rater "B", had a marked tendency to give "lower" scores than did the other three raters. This tendency produced the observed heterogeneity overall among the raters. An additional G-test was performed excluding the scores of Rater B. This was found not to be significant.

Specific Agreement Rates

Given the above findings a more specific inspection of agreement among raters on the various discrete inkblot samples was justified. For each family, a Kappa statistic was computed (Fliess, 1971) which measured the degree of agreement between raters who rated each sample on a nominal scale, correcting for the amount of agreement among them that might have been expected by chance.

Values of .44 and .47 were obtained for the normal family and family with schizophrenic offspring, respectively. This represents

the percentage of agreement, better than chance, attained among the raters for each family.

Agreement Rates Over Time

To inspect for the possibility of changes over the course of the study, two separate K statistics were calculated for each family for the first and last six weeks.

The normal family had a lower Kappa for its first six weeks. Conversely the family with schizophrenic offspring had a lower Kappa on its last six weeks. This strongly suggests that no particular increase or decrease in the values of the scores transpired as a function of time. The overall Kappas for each family were thus found to be comparable.

Internal Constancy of Each Family's Response Style

A G-test was conducted using each respective family's total scores (as produced by the four raters) which compared the first half of the test administrations to the second half. Certain categories were again collapsed to reduce zero values in cells. The G-test for the normal family was significant at .005 indicating significant shifts in their communication styles on the Consensus Rorschach. The family with schizophrenic offspring showed no significant shifts in their communication style.

Family Comparison

Percentages of total number of scores assigned to each of the nine possible communication levels were tabulated for the respective

families. For the target family 86 percent of the attained scores were 4 or lower indicating a high degree of overt disagreement, vagueness, qualification, or a lack of specificity in their written responses. In the comparison family (Thurber) a much smaller (51 percent) of their scores were within this range. In this latter case 81 percent of the low scores were given for a lack of specificity rather than for overt disagreement, vagueness or qualification. As families were not matched on many variables, comparisons were limited to more global aspects of their behaviors in the course of the study. (See Figure 1.)

A median test was also conducted to see if the scores assigned to the respective families differed significantly. The median test was significant at .005 indicating that the scores assigned each respective family were distinctive in representing specific styles of interaction. This is graphically represented on Figure 2.

Familial Communication Style as Revealed in Their Written Responses

The Larsen (target) family's written responses to the Consensus Rorschach were extremely terse in nature. Little or no elaboration was offered and labeling occurred only once in the entire twelve weeks. Responses were typically one word in length with a circle drawn on some part of the blot. The target offspring rarely, if ever, circled any part of the blots. (See Figure 2.)

In contrast, the control family (Thurber) displayed a marked tendency to elaborate, diagram and experiment with their responses. Their responses were highly enriched when compared to those produced by the target family, sometimes including interjections of humor and

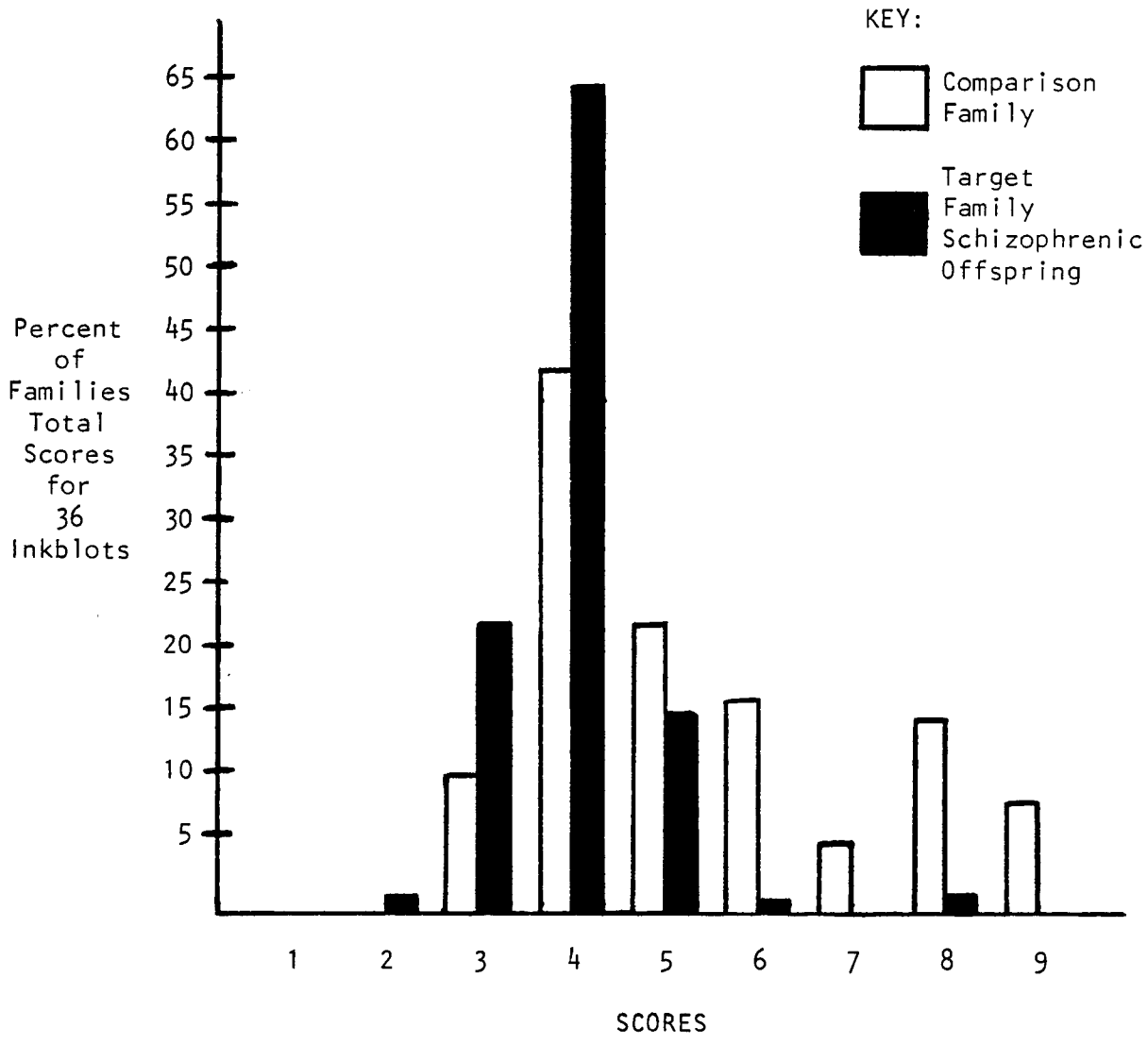
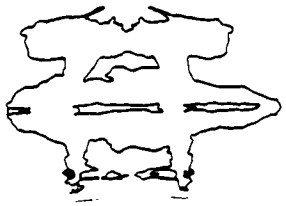


FIGURE 1

COMPARISON OF PERCENTAGES OF OVERALL SCORES FOR EACH FAMILY



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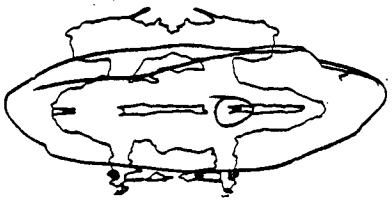


Airplane on runway

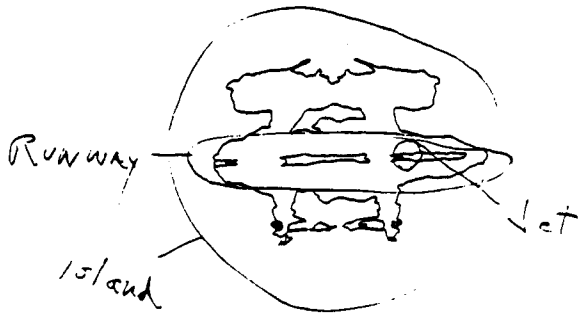


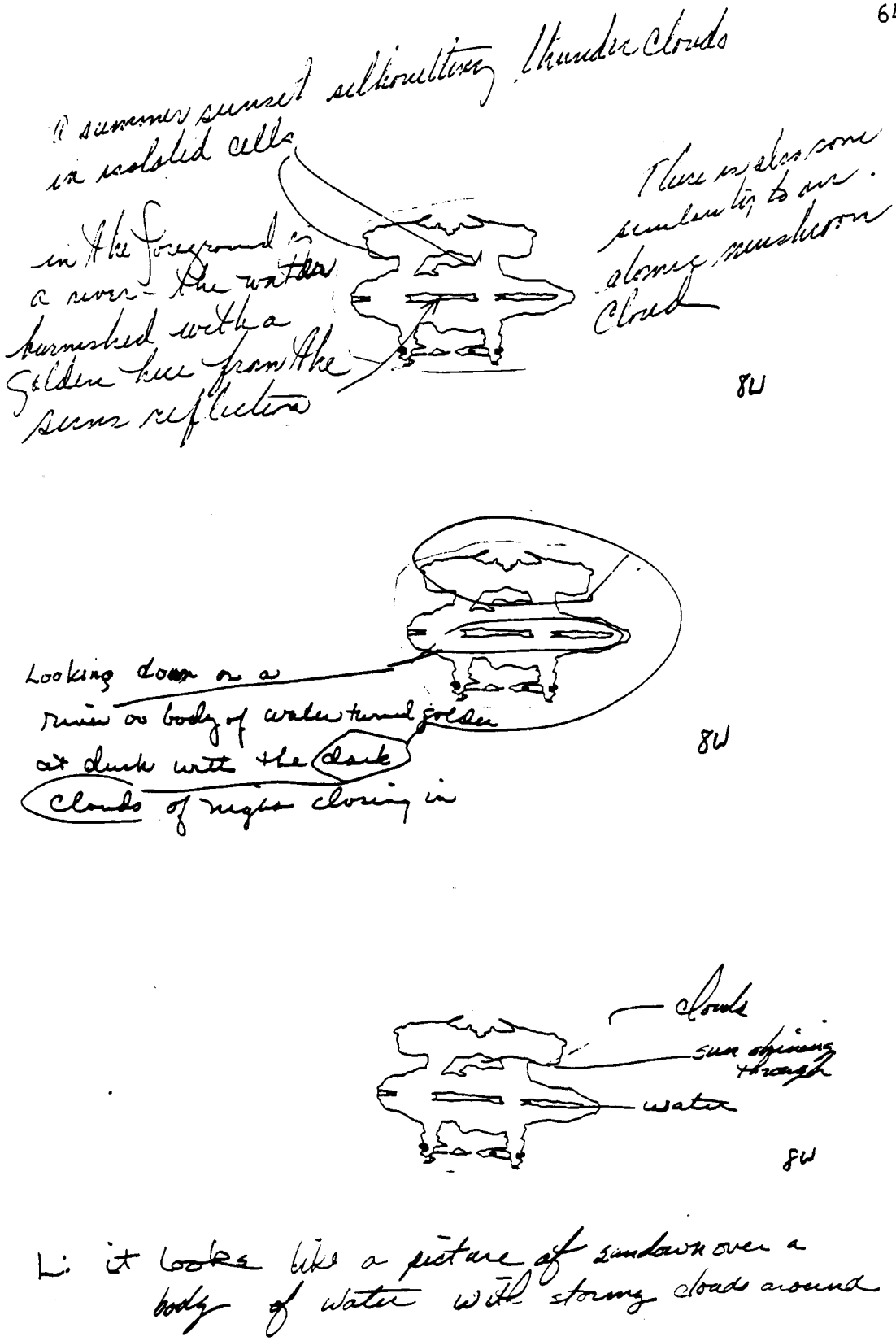
FIGURE 2

TARGET FAMILY WRITTEN RESPONSES TO CARD NUMBER 8
HOLTZMAN INKBLOT

playfulness. (For an example of this family triad's more enriched response style to blots see Figure 3.)

Behavioral Observations During Consensus Rorschach Administration

The target family's interactions during the administration of the Consensus Rorschach were highly stereotyped in nature. The mother was observed as the dominant force throughout the task, structuring conversations and pushing for rapid (if not premature) closure. Upon presentation of a card she would typically elicit a percept from her husband or offer a quick and simple response (e.g., "oh, it looks like some kind of insect"). She would then ask her husband if he agreed with her percept. His reply was usually a slight variant of her original percept or a simple affirmative. The father or mother would then ask their schizophrenic son if he saw the expressed percept. The son invariably asked the parents to repeat what it was that they saw and would then state: "Yeah, I see a _____," repeating the parents' stated percept. At this juncture the mother would indicate to the examiner that an agreement had been reached. On rare occasions the father would offer a suggestion prior to the mother and this percept would be quickly agreed upon by the family. Only on one occasion did the target offspring volunteer a percept of his own. This, too, was summarily agreed upon by the family with prompting by the mother. (Example of the family's responses to several inkblots is provided with a verbatim tape transcript and their written responses for illustration. See Appendix C.) The full administration of three inkblots per session typically lasted from 15 to 30 minutes.



L: it looks like a picture of sundown over a body of water with stormy clouds around

FIGURE 3

COMPARISON FAMILY WRITTEN RESPONSES TO CARD NUMBER 8
HOLTZMAN INKBLOT

The Thurber family appeared to be more engaged by the process of achieving a consensus throughout the twelve week testing period. The apparent novelty of the stimulus cards appeared to intrigue and excite the family at each sitting. The presentation of any given card was typically met with comments as to the artistic qualities, emotional valence, complexity, simplicity, or perceived humorous qualities of the presented inkblot.

No clear patterns of dominance emerged as each of the family members appeared to offer equal numbers of percepts to each blot. Likewise, family members appeared to alternate the task of structuring the interactions and pushing for closure. Typically it was Mr. Thurber who ultimately indicated that a consensus had been attained. Conversations regarding the blots appeared to wander at times as the inkblots appeared to trigger free association and lengthy verbal expression. The family appeared to experience little internally generated pressure to limit the length of time spent on any particular card or the number of possible responses to it. At times their "struggle" to obtain closure was lengthened by the sheer wealth of responses generated by a given card. The family worked to achieve a democratic approach towards consensus with each family member being polled for their choice of a "best" response. At times responses were modified by the triad in an effort to accommodate two similar or overlapping responses. Unlike the target family, this family took an average of one to one and a half hours to complete a battery of three cards. (An example of the interactions observed during administration of the Consensus Rorschach is provided by means of a verbatim transcript of one session and the written responses produced. (See Appendix D.)

Home Observation

As might have been anticipated, the broad band of information available through naturalistic observation also had the potential to lend greater dimension to externally induced confounding variables (Johnson and Bolstad, 1971).

In the course of this study various technical problems arose which somewhat compromised the overall value of the home observations. Equipment malfunction or limitation contributed to some loss of possible data. For instance, several recording segments were obliterated as a result of a short circuit in the microphone cord. Microphone sensitivity also played a role in limiting the amount or quality of data. Conversations not within approximately twenty feet of the recording device tended to be inaudible on the tapes. Microphones also tended to distort the recordings of communications at higher volumes (e.g., arguments).

The loss of data due to equipment failure or limitation pales in comparison to the amount rendered difficult or impossible to utilize because of extraneous domestic noise. In particular, the target family's habit of playing their television set at very high volumes throughout their waking hours seriously compromised the efforts to observe family interaction on audio-tape. Conversations which were low in volume were obscured by the television sound. Other interactions which were spoken above the volume of the television were so distorted as to be unintelligible.

In other instances periods of somnolence were recorded during which no interactions were discernible in the family home.

Overall instances of noninteraction were far more in evidence on the audio-tapes than were instances of interaction. Interactions, when occurring, also tended to be brief in duration.

Several tape segments presented interesting exceptions in their clarity and quantity of verbal material. One particular exchange appeared to exemplify the sorts of interactions described by earlier theorists as indicative of deviant communication (e.g., Wynne, 1958). In this compelling segment the father and mother are overheard as they become deadlocked in a vortex of disputes with their ten year old children (fraternal twins). For purposes of later discussion it is presented here:

Key--F: father
M: mother
G: 10 year old son
L: 10 year old daughter

F: (coughs)

L: I don't want to go to church!

G: I ain't going to church!

F: Gilly, take those muddy shoes off! The mud's going to dry and fall all over the floor.

G: Too bad for the floor.

F: Gilly, why you wanna ruin what we got? It will dry and take the varnish off it. It acts like sandpaper to it.

G: I ain't gonna.

F: You either take 'em off or I'll whip 'em off.

G: (shouting) I SAID I'D DO IT NOW! Now I ain't gonna do it!

F: I thought you said you weren't gonna do it. What did you say?

M: Come on, change 'em.

F: You heard me . . . come on!

M: Lucy, you got clean clothes?

F: I don't believe . . .

G: I said (unintelligible).

F: I don't believe the way you talk.

M: Lucy, get ready. You got clean clothes?

F: I don't believe . . .

G: (screaming) I SAID I WOULD ALREADY!!!

-- someone goes "shushhh."

F: Sounds like you said you weren't gonna do it. What did you say you were gonna do? You say you were gonna do it?

G: I was gonna.

F: Well, if you did, I misunderstood what you said.

M: Gilly . . . Lucy's ahead of you.

G: I said I was going to church.

F: Well you better put better clothes on.

G: YAAAAAAA!!!

F: You got the cheapest clothes on . . .

G: They're not the cheapest; they're the best.

F: They're the cheapest.

G: (shouting) But they don't got holes in 'em.

F: They are the cheapest clothes.

G: What do you mean, they're cheap?

F: They were cheap to buy and they're made . . . look at the fly is now; those are cheap made pants.

G: That is a rip! (shouting)

F: They are cheap made pants.

G: (screaming) That is a rip!!!

F: (shouting) They are cheap made pants.

G: (still screaming) THEY ARE RIPPED!!!

F: That's what I'm sayin'. They're cheap made pants. Don't you understand what I'm sayin'? They're cheap made pants!!! (with growing exasperation)

G: Yaa, the best pair of pants you ever saw.

F: My pants don't rip that fast; I've got pants for years. They're cheap made pants.

G: That's the way I bought 'em.

F: No, that's not the way you bought 'em cause they weren't like that when you put 'em on.

M: I wanna say something . . .

F: They're cheap made pants . . .

M: They're stockings and they've changed her clothes already. While you're waiting for us at the meeting take two dollars and go to Woolworth's or Ward's and get tennis shoes.

G: ME!

M: That's two dollars a person.

G: That's my money, the two dollars!

M: I don't know, but someone's going to gym this week. That you have in the summer.

G: Daddy, give me my two dollars . . . Dad . . . DAD!!!

F: (unintelligible)

M: It's better than paying ten dollars in two months.

G: (shouting) Give me my two dollars! Give me my TWO BUCKS!! (sing-songs) Give me two bucks, two bucks, two bucks.

M: By the time you change, Lucy's got changed already.

F: If you wanna get two dollars you gotta do some changing in the very few next minutes. Now change your clothes, get cleaned up, and act right.

G: (unintelligible)

F: If you do, I told you they're not made right. They're cheaply made pants. The rip is in the seam here which is still here. It was not made right. I never had a pair of pants which ripped like that.

G: It ripped never stopped.

F: Well this is where . . . you see the seam there . . . Look on the other pair of pants; you'll see the threads that this isn't made right.

G: Nope.

F: Well you can see they weren't sewn right . . . They made cheap made pants.

Juxtaposition of Consensus Rorschach with Non-Obtrusive Home Observation

The limited situation-specific nature of the data obtained through home observation obviates an accurate comparison of results from each of the measures. Attempts to quantify statistically or qualify objectively the recorded materials were effectively thwarted by the limitations enumerated above. Attempts were made to count the frequencies of aversive interactions, open-ended statements, "double-bind situations" and peculiar usages of language. However, interactions were either too short or too few in number to discern accurately any specific trends in communicational style.

Sampling Issues

A wide variety of sampling variables may exert a powerful influence on the outcome of family studies. Such variables with a high degree of visibility include the family's social class, ethnicity, religion, the age of family members, gender distinction, treatment status, and length of hospitalization. Given these potential variations in sampling, a brief discussion of difficulties pertinent to this study appears to be in order prior to a full consideration of its results.

The use of Lithium Carbonate is finding increasing popularity for use with psychotic populations in large psychiatric institutions. Psychotic patients who appear to respond to this medication are often rediagnosed in a post hoc fashion from a diagnosis of schizophrenia to bipolar disorder. In many settings, this trend is so pervasive that it has negated the differential diagnostic value of the term bipolar disorder. It has also largely reduced the number of individuals carrying a schizophrenic diagnosis, and thus reduced the size of the population from which subjects could be recruited for this study.

In efforts to locate suitable schizophrenic subjects at three large urban psychiatric hospitals, it was often observed that primarily long term chronic inpatients had retained their schizophrenic diagnoses. These individuals, of course, seemed unlikely candidates for the purposes of this study, given its emphasis on ongoing family interactions.

As this project entailed the use of home observation, it was also essential that the schizophrenic offspring be discharged to live

in the family home. Another recent trend which influenced the availability of subjects involves the placement of patients in foster care facilities in lieu of the return to the home. While this trend represents tacit acknowledgement to the family's role in the maintenance of schizophrenia and the shizophrenic's high rate of hospital recidivism, it also served to limit the number of potential family subjects.

One requirement of this study was to have intact families (with both natural parents) participate in structured and non-structured situations. As is well known, a disproportionately high number of schizophrenics come from homes in which one parent is not present through death, divorce, or other life event. This, too, contributed to sampling difficulties. A lack of subject cooperation may be conceived of as a natural outgrowth of the psychological dynamics of schizophrenia itself. As is well known, one large component of schizophrenia is a preponderance of paranoid ideation. Asking schizophrenic individuals to submit to both testing and electronic surveillance proved to be a highly delicate if not an altogether dubious enterprise. Subjects agreeing to such conditions in all likelihood comprise a particular subgroup in the schizophrenic population at large, and this must be kept in mind when examining the current results. The use of a written response method also requires that subjects have a modicum of literacy. Two families with schizophrenic offspring who had agreed to participate in the study were eliminated when it was discovered that one or more of the family members could neither read nor write without assistance.

In contrast to the family with schizophrenic offspring, it was a relatively easy task to locate a normal family for purposes of comparison on the Consensus Rorschach task. None of the above-listed sampling problems experienced with the target family were observed to play a role in the study of the comparison family. However, various other artifacts, including their very willingness to participate, in the study may have contributed in various unknown ways to "bias" this small sample. Of course, these potential influences would be difficult to gauge given the descriptive, rather than statistical, nature of this study.

Subject/Examiner Interaction in the Course of 12 Consensus Rorschach Sessions

As dissimilar as the two families were in their availability, so too were they different in their interactions with the examiner who visited their homes for testing sessions.

Initially, the target family members accepted the examiner into their home with both deference and some hesitancy. It seemed that a visit by a "doctor" to their home was experienced as a noteworthy event by the parents. However, their schizophrenic son was highly reluctant to leave his bedroom and join in the family meetings. At the first scheduled in-home interview the schizophrenic offspring had to be cajoled into attendance. Upon arrival at the target family home, it customarily fell to the examiner to find each family member and instruct them to meet in the kitchen. It was frequently necessary for the examiner to structure the test sessions and to ask non-involved,

peripheral family members to avoid interactions with the participants. Once the actual testing was completed in each session, family members frequently left the room in an abrupt manner. While the examiner was typically given a warm greeting upon his arrival, the target family members often appeared reticent and awkward in longer interactions. In an effort to retain the family's interest and willingness to continue their participation, it was necessary to draw the family into casual conversation at the close of each testing session. This seemed moderately successful in diminishing their anxiety and fostering a generally pleasant interactive style.

The comparison family presented itself as a far more cohesive unit. The examiner, arriving at his regularly scheduled appointment time, often found the entire family in their kitchen, engaged in animated after-dinner conversations. This family structured its own testing sessions by asking non-involved family members to leave the room or abstain from interacting with participants. Following the written Rorschach administration, they appeared eager to draw the examiner into conversation about topical events and issues, and frequent inquiries regarding the examiner's personal life were noted.

At the close of the twelve week assessment period both families displayed behaviors which revealed attachments to the examiner. At the close of the last session, while the target family was being debriefed, the father began presenting the examiner with leaflets and sales brochures produced by his employer. He went to great lengths to explain the manufacturing processes involved for each product. Attempts by the examiner to conclude the evening's meeting were

disregarded by the father as he continued to refer to his literature and to tell stories about his work.

Likewise, the comparison family seemed highly reluctant to allow the examiner to leave their home. As a parting gift they had prepared baked goods for the examiner to take home. Approximately two weeks after their last session a telephone message was received by the examiner indicating that the family missed him and his inkblots!

The Applied Consensus Rorschach

In giving the Consensus Rorschach over a twelve week period certain observations were made regarding the test itself and its administration. Neither family appeared to have any difficulty in comprehending their task with the inkblots. The ongoing presence of the examiner in the testing room appeared to have some stimulus value for each family. This was noted by the occasional attempts by differing family members to engage the examiner in discussion during the test administration. The impact of the examiner's presence remains uncertain, however, as no family was tested without an observing examiner present.

In all the administration of the written Consensus Rorschach was remarkable for its simplicity and ease in administration. Scoring family responses, however, posed a few problems. The original scoring manual used by Shapiro and Wild (1976) left some scoring issues unresolved. No particularly useful operational definition of labeling is provided. This leaves the individual scorers responsible for defining types of labeling on the location charts. A more difficult situation arises when family members include under the rubric of consensus,

several percepts, all of which are available for scores. In these instances scorers are left to decide what the "chief" percept is and then must score only that part of the overall response.

Despite these small limitations, raters were able to agree with one another regarding the scores they assigned in most instances. The lower inter-rater reliability detected on the scores given for the target family were felt to reflect qualities of the family responses rather than difficulties interpreting the scoring manual.

Scores obtained by both of the families were highly consistent with those obtained by families with schizophrenic offspring and normal control families in the single test situations reported by Shapiro and Wild (1976). In their study 61 percent of the families with schizophrenic offspring (N = 36) consistently had scores of 4 or lower. The normal control families had only 31 percent of their overall scores within the 1 to 4 range.

We can see, then, that in this instance the product analysis of written Consensus Rorschach responses did appear to distinguish a family with schizophrenic offspring from a comparison normal family.

However, as this is primarily a descriptive study with a limited N of two families, the findings obtained are chiefly of use in generating additional questions and hypotheses. Caution should be exerted in attempting to generalize these findings to other situations.

CHAPTER IV

DISCUSSION

A central thrust of this study was the examination of the Consensus Rorschach - Product Analysis method (Shapiro and Wild, 1976) as a diagnostic and research tool. Questions posed regarding this method include its reliability over time; its sensitivity to differences in family communicational styles and its overall ease in application.

Statistical interpretation of the aggregated data generated through the repeated administrations of the written Consensus Rorschach suggests that significant differences do exist between the communicational styles of the two families studied. On the basis of this limited N and previous studies it does appear that the product analysis of written Consensus Rorschachs is one possible way of distinguishing families of schizophrenics from other types of families.

The target family was seen to respond to the Consensus Rorschach in a highly predictable or stereotyped manner. A disproportionate number of scores assigned to their responses indicated a lack of shared meaning, focus of attention or overall agreement. A full 86 percent of their responses were either so terse (e.g., one word with no elaboration) or global and vague (e.g., one word with no diagramming or labeling on the accompanying location sheets) that only a "surface" or overt level of agreement could be scored with any degree of confidence. Deeper, more sophisticated or enriched levels of

of agreement, such as those regarding exact position, location and action of the responses (subsumed in higher scores of 5 through 9) required a cognitive "leap-of-faith" or filling-in on the part of the raters. Hence they received the prescribed "lower" scores.

The target family in this study seemed compelled to complete the task as quickly as possible as if speed were of paramount importance rather than creativity or assurances of mutual comprehension. Initially this may have been a function of some discomfort with the examiner, or with the task itself. However, the lack of any significant change in family scores over a twelve week period would seem to refute this notion. Rather, the family's propensity for achieving premature closure as well as the relative stability of their scores over time, appeared to be indicative of more enduring characteristics of the family's interactions or communicational style.

The target family appeared to be lodged in a response "set" which effectively precluded any possible in-depth discussion or disagreement about the perceptions of the inkblots. This type of interaction bears a strong resemblance to the "pseudo-mutual" nature of relationships in the families of schizophrenics discussed by Wynne, et al. (1958). As will be recalled, in pseudo-mutual relationships there is a "predominant absorption in fitting together at the expense of differentiation of the identities of the persons in the relation" (p. 207). During the interactions required for reaching a consensus, the target family appeared to be "tangled" in this type of interaction. It appeared that a strong investment in homeostasis or the maintenance of a pleasant facade of agreeability was in effect. At the

close of one testing session the father described the pseudo-mutual dilemma in his own words (while describing his experience on the Consensus Rorschach):

> This is hard, you gotta agree even if you don't agree, but you lose part of your opinion. You just gotta agree.

It can be inferred from his statement that divergence from the family norm may be experienced as being prodromal to a major fracture in the relationship. The apparent cost of adherence to this "contract" is a loss of individuality or personal identity within the family matrix.

In contrast to the target family, the comparison family revealed a much broader range (at a significant level) of communicational capacities or skills. This was demonstrated in their written responses on the Consensus Rorschach. While greater variability existed in the scored levels for the comparison family, fewer overall "low" scores were given to the comparison family than to the target family with schizophrenic offspring. As mentioned in the results section, these findings are consistent with the earlier findings of Wild and Shapiro (1976).

In related studies (e.g., Mishler and Waxler, 1968) normal families have been found to have a greater range of tension relievers, to laugh more often and express indirect positive affect more often than families with schizophrenic offspring. The statistically significant variation in the normal/comparison family's scores appears to lend support to this position.

It should be pointed out, however, that the variation in family scores may be an artifact of poor internal validity. The Consensus Rorschach may reliably be measuring a family's liveliness, spontaneity of discussion, or verbal aptitude. The task itself may be more stimulating to families higher on the socioeconomic ladder which may be stimulated by this sort of creative challenge. Lower class families may be less stimulated by this sort of challenge. Yet difficulties with shared focus may also be the cause of creative inhibition (Wild and Shapiro, 1976).

The possible implications of these perceived familial disparities might be of some use for practitioners seeking interventions for seriously disturbed families. A family with more flexible interactive skills would appear better equipped for negotiating the vicissitudes of daily life. Families which display overly stereotyped interactive styles might be expected to reach frequent "log-jams" in which their inability to accept differing perspectives leaves them with no way to obtain comprehensive or in-depth solutions. On the basis of the written responses to the Consensus Rorschach we can surmise that the target family attempts to negotiate ambiguity through constriction in the form of "pseudo-closure." Tacit agreement is often accepted in lieu of fuller understandings. This premature closure need not always take on the form of one person's opinion. Pseudomutuality might entail a shared distortion of reality, or a shared determination to only see things "one way." Hence in situations wherein family members are called upon to act on their level of understanding, the lack of deeper

understanding or presence of autistic logic results in chaos. This is seen clearly in the tape segment reported in the results section. The family appears caught in an almost comical series of repetitive and aversive exchanges. The members of the family (the father in particular) appear myopic to conceivable alternative ways of resolving the dilemmas posed by an extremely oppositional ten year old son. The wife offers no divergence and serves only to temporarily divert the father's attention from his son's refusal to change his "cheap pants." The father appears to be reduced to a stammering and ineffectual parent. This sort of exchange appears archetypical of the familial exchanges described by many family theorists (e.g., Wynne, Bateson, Lidz, etc.).

As indicated in the results section, some heterogeneity was discernible in the four raters' scoring of the target family's scores. This lowered reliability for scoring the responses of families with schizophrenic offspring was also found by Shapiro and Wild (1976). It has been suggested that something intrinsic to the productions of such families makes their responses more difficult to understand. As responses become more vague and more difficult to comprehend they also become more difficult for two or more objective raters to see them (the responses) the same way. Given the target family's disproportionately greater number of low scores, some scoring problems are to be anticipated. This problem might be rectified by requesting more than one agreement for each inkblot. The use of only one agreement may in fact foster premature closure around the more obvious or popular responses (Shapiro and Wild, 1976). The premature closure observed

with the target family greatly resembles the "leveling off" phenomenon described by Levy and Epstein (1964) and discussed in this paper on page 28. In "leveling off" the presence of the entire family seems to help suppress maladaptive, impulse ridden expressions (more commonly seen in individual traditional Rorschach administrations) as well as more elaborated or enriched "good-form" responses. Future studies might wish to increase the number of responses requested for each card so that more scorable responses might be obtained.

One of the original questions which prompted this study was the use of non-obtrusive home observation for the study of families with schizophrenic offspring. Riess (1967) has suggested that the presence of an examiner during the course of objective testing may exert a confounding influence in studies of communicational deviance. Despite some of the technological difficulties experienced in this study the use of non-obtrusive home observation techniques still appears to be a promising way of circumventing the problem described by Riess. Technological improvements may, in the future, increase the amount of data which is obtainable through in-home tape recordings. The addition of video recording equipment might also expand the amount of obtainable data. With the use of television recording devices data such as gestures, position, and instances of physical contact would become available for analysis.

Data obtained in this study with the use of tape recordings, while limited in quantity and quality, was nonetheless a fascinating glimpse into the private life of a seriously disturbed family. The frequent intrusion of television noise on the tape recordings may

suggest that television in the home is not an incidental component of the family's daily life. Television may serve as a form of passive consensus for a family which has so much difficulty obtaining shared meaning in life. The noise of a loud television or radio effectively removes avenues for in-depth interactions much like the noise on a subway. In the cacophony of television and radio noise family members seem to interact with one another like ships in the night.

In conclusion, this study modestly appears to suggest that with certain refinements both the Consensus Rorschach and non-obtrusive observations with the use of electronic surveillance equipment offer the research community convenient and effective means for studying communications in families.

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APPENDICES

APPENDIX A

INFORMED CONSENT FORM

FAMILIAL INTERACTION PROJECT

The purpose of this project is to find out how family members interact with one another, both on an assigned task and in non-structured home situations. We think that there is much to be learned about the ways in which families interact and communicate. We plan to use what we learn from this project to better help families with problems.

You have the right not to participate in this study. However, should you choose to participate, it would involve taking part in at least one interview and testing session lasting approximately two hours. Certain families will be asked to participate in additional assessment interviews which will take place once a week, over a period not exceeding 12 weeks, and usually lasting about one to two hours per interview. Interviews will be arranged for mutually agreeable times. You would be free to change the scheduled interview times, or to cancel them. For your convenience most of the scheduled interviews would be conducted at either the The Sheppard and Enoch Pratt Hospital or in your home.

In addition, the use of audio tape recording devices may be requested. Under all conditions, your participation will be kept strictly confidential.

This is only an information gathering project. It is not connected with your therapy at Sheppard and Enoch Pratt Hospital, and there will probably be no direct benefits to you as a result of your participation. There are also no anticipated risks to you as a participant. We hope that the knowledge gained from this project can be used to design better programs for families in the near future. Should you decide to participate you will have the right to request a copy of any report generated by this study. As stated, under all conditions, your participations will be kept strictly confidential.

If you have any questions concerning this project please feel free to ask them at any time. You may reach the coordinator of this project by calling JOSHUA WILLIAMS at (202) 546-4850. Should you wish to lodge a complaint or obtain additional information you may also contact Alice Schreiber at Sheppard and Enoch Pratt Hospital, (301) 823-8200. Of course you can discontinue participation in the project at any time with no penalty. Withdrawal from the project will also have no effect upon treatment already under way at Sheppard and Enoch Pratt Hospital. In addition, should you decide not to participate in the project, there is also no penalty.

I have read and understand the above information concerning the FAMILIAL INTERACTION PROJECT. I agree to participate in the project.

Signed: _____

Witnessed: _____

Date: _____

APPENDIX B

GENERAL RULES FOR SCORING FAMILY RORSCHACH
(a measure of family interaction)

You have been given a packet containing sets of photocopies of family responses to inkblot cards. Each page in the packet has three responses to a given blot--one response from each family member. It is your task to characterize the quality of agreement or disagreement using a nine point scale. Families have been given thirty-nine cards so that there are thirty-nine responses (or pages) per family.

Scoring is done in an ASCENDING HIERARCHICAL manner starting from the vaguest to the most detailed and clear types of written responses. We begin at the lowest level: Level 1 which is given for vagueness; if the responses do not meet the criteria for this score we go up the ladder to Level 2 (Qualification) and so on. . .

Note: A particular level may be achieved in a variety of ways. See for example: Level 3. Any of the varied set of criteria listed for this level is sufficient to yield a Level 3 score.

LEVEL 1: VAGUENESS

A. A response is written by all three family members. Despite its being the same response it is so vague that it is impossible to tell whether the family is in agreement or disagreement (i.e., the family writes: "an abstract painting" or "shapes" or "one pattern" or "figures" or "forms" and so on . . .).

B. Responses offered by the family contain some vagueness in addition to qualities of either Level 2 or Level 3 (which are DISAGREEMENT & QUALIFICATION). Responses may not be so vague as described in A above but there is so much qualification, disagreement and vagueness among the three family members that it is difficult to tell if they ever did reach a true agreement.

LEVEL 2: QUALIFICATION

(Note: To score this level responses must be qualified by at least two or more of the family members.)

A. Either/or responses (i.e., "either animals or people," "could be a body-human or animal"). Qualifications of similar responses such as "mouse or rat," "a butterfly or a moth" (as on Card I), or "rodents or woodchucks" (as on Card VIII) should not be counted as either/or.

B. Qualifying phrases: Written as statements which indicate a lack of commitment to the response. For example: "Possibly," "Could be . . .," "Animal like . . .," "Human appearing," "It resembles . . ." (If there was a clear commitment to an initial response and then qualifiers were added this level is not scored (i.e., "lovely flowers - maybe tulips").

C. Deferring responsibility for responses: Individual writes "they" or "someone" or "the examiner" or "appears to be" or "they intended it to be" or "the others called it . . ." and so on.

D. Questioning responses: When a family member(s) writes their response in question form (i.e., "Could it be an otter?" or "could it be a bird?"

LEVEL 3: DISAGREEMENT

A. Inexplicit Disagreement: This is scored when different family members write down different basic percepts, i.e., one writes down "people" and the other writes down "bears," or one writes down "flower" and the other writes down "skeleton." Don't include minor disagreement such as "sheep" and "lamb." THIS LEVEL IS SCORED IF 2 FAMILY MEMBERS WRITE DOWN THE SAME THING BUT THE THIRD FAMILY MEMBER WRITES DOWN NOTHING. Also it is scored if the same thing is seen but on different parts of the blot. If one person sees a human in the middle of Card 1 and the other uses the whole card and calls the sides a cape, don't score, but if one person uses all of Card 1 for a bat while another uses a very tiny detail or one person sees a bird at the top of Card II and the other sees the bird at the bottom, Level 3 is scored!

B: Explicit Disagreement: Family member(s) explicitly state in their written response(s) that no agreement could be reached. The individual(s) may list their own preference or response or give an area of vague agreement with specific differences (i.e., "we all agreed that it was an animal, but nobody could agree on what type of animal it is. In reality it looks like a lamb to me"). Score only if the disagreement is on the chief percept for the blot. For instance you would not include a response of "Lions climbing up on the side; we couldn't agree if it was blood or ice cream on the bottom." In this case the main percept--lions--shows agreement.

C. Very General Written Response with completely different labels on the location blot: For example, on Card II the written response is "animals" but one family member labels the top red section as seals, another side as dogs; or one person labels one side donkeys and another monkeys. Don't score a set of responses as having different labels on location if one person is simply more specific than the others. For example on Card VIII one person labels a location otters while another puts down animals.

D. Singular/Plural, Part/Whole, Position Differences:
   1. Singular/Plural: Scored, for example, if one individual writes "a person" and another subject writes "3 people." Something like "bear" versus "bears" is scored only if it is clear that there was a different perception on the blot (i.e., one person saw a bear and discounted the other figure as a reflection (didn't write it down) while the other saw simply 2 bears. Do not include here if the differences are resolved on the picture of the blot.
   2. Part/Whole: "bear," the "head of a bear."
   3. Position Differences: (i.e., on Card I) "Birds flying."

E. Additional Percepts: There is agreement on one or more basic percepts, but one or more family members adds an extra unrelated percept or bizarre or unusual extra part to what is written by all family members. This may be added only on the location chart. Or one or more family members draws on the picture of the blot adding parts or otherwise substantially altering the blot in order to make the blot fit the percept. For example on Card VIII all family members write down "beavers" but one person adds "flowers on the bottom." Or on Card II everyone writes down "bears" but the son adds "fleas on the bears" on the location chart, away from one another.

> [For the purposes of scoring the next highest levels the term LABELING is defined as: . . . naming <u>parts</u> of the given response in a descriptive manner, e.g., "legs," "fur," "head," etc. Naming is counted as labeling when the response contains two or more different specific responses and the names are used to indicate where on the blot each response is located. For example: "Birds on a tree." The tree and birds are circled separately and named. Two of something or something and its reflection are not counted as two different responses. You should separate every set of responses not categorized as being Level 1, 2, or 3 where <u>any</u> family member does not label two or more parts of the location chart. Additional descriptive adjective (one not written) simply counts as a label.]

<u>LEVEL 4: NO PARTS LABELED</u>

No parts labeled or one person labels one part, e.g., Mother: nothing; Father: nothing; and Son: labels one part.

<u>LEVEL 5</u>:

At least one person labels two or more parts and at least one person does not label anything at all. For example: Mother: nothing; Father: labels one part; Son: labels two parts. If there are two separate responses (such as cats, dog

LEVEL 6:

A. All those not in previous categories in which at least one person labels only one part, e.g., Mother: 2; Father: 2; and the Son: one. Or Mother: 1, Father: 1; & Son: 2.

or

B. Any general unelaborated response even if all label two or more parts. This cannot contain any response where one person labels nothing at all. Unelaborated responses are defined below.

THE HIGHEST LEVELS OF SCORING ARE CLASSIFIED ALMOST EXCLUSIVELY ON THE BASIS OF THE SPECIFICITY, ELABORATION, INTEGRATION, AND CREATIVITY OF THE RESPONSE. Criteria for the levels is described in detail following their brief introduction as follows:

LEVEL 7:

Unelaborated popular and specific responses and general and popular types of responses which are simply elaborated. Each person must label 2 or more parts.

LEVEL 8:

Two or more separate and unrelated responses. May be popular or specific and may be elaborated or not. For example: "A woman, two birds" (on Card I), "a rocket blasting off," "a butterfly and two dogs." Also simply elaborated specific responses, e.g., "Cossack dancers twirling."

LEVEL 9:

This level is scored for complex elaborated responses often containing more related and integrated elements. It uses the entire card, gives a great deal of description so one can easily visualize the response and may be creative or unusual. It closely resembles the + developmental scoring on the Exner Rorschach scoring system, except in this case: 2 or more parts must have been labeled by everyone. Minor differences in elaboration are ignored, e.g., "Wolves climbing a fir tree to escape a forest fire" (for Card VIII), "Hawks clawing a screaming headless woman into two pieces" (on Card I), "Full rigged sailing ship with hull, mast, and fluttering sails coming toward you" (on Card VIII).

CRITERIA FOR LEVELS 7, 8 & 9

SPECIFICITY OF RESPONSE:

1. GENERAL--these are the least specific responses, describing a class rather than any particular example of that class. For example the subjects say: "animals" rather than naming a specific type of animal such as a bat. Other general responses are things like "map," "profile," "person," "insect," etc.

2. POPULAR--a specific response commonly given by a great number of people. Kindly use Exner scorings of Popular responses for the Herman Rorschach cards. For your convenience the 11 Popular responses for the Holtzman blots are listed on the last page of this manual. Populars for Card I (Rorschach) include bat, butterfly, any kind of person in the center, etc.

3. SPECIFIC--responses which are not general or popular.

DEGREE OF ELABORATION:

1. Unelaborated responses: usually given in one word. While there may be reference to their placement on the blot there are no adjectives used in describing them nor are they seen as being involved in any action. This class would include such items as: "bat" (card I), or "two bears--one on each side" (on Card II), "two rats facing each other" (for Card VIII).

2. Simple elaborated responses:
   a) May or may not use the whole blot.
   b) May contain one or two related responses, e.g., "rats on rocks" for Card VIII or "men climbing a tree" (Card I).
   c) May involve motion or movement, e.g., "dancers twirling" (Card I) or bears "clapping hands" (Card II).
   d) May have one or two descriptive adjective or elaborations, e.g., "dancers with capes," "furry teddy bears," "wild fierce animals."

3. Complex elaborated responses: <u>utilizes the entire card with a wealth of description and action</u>.
   a) A scene in which each part is specifically described, e.g., "two rats climbing from some rocks up to a pine tree."
   b) A complex integrated response containing a number of carefully described elements. E.g., "anatomical drawings--lungs, ribs, pancreas, and kidneys," or "circus act" or "undersea scene" (each with a full description of its many elements).

<u>NOTES</u>

APPENDIX C

TRANSCRIPTION OF TESTING SESSION WITH TARGET FAMILY

CONSENSUS RORSCHACH

Holtzman Inkblot Card 19A

KEY:

F: Father
M: Mother
S: Target Offspring (son/Bob)

M: Looks a little bit like two penguins. Like a penguin here and a penguin here. That what it looks like? Huh? Or do you . . . do you think it's that? Huh? Or do you see something different? What do you see? (to husband)

F: Might be somebody . . . could be two people right there or . . .

M: Yeah it could be . . . could be a lot of things . . . People, hummm. What do you think it is Bob? (son) Let's Bob say something, what do you think it is Bob?

S: You talking to me?

F: Yeah.

M: What do you think it is?

S: What's it look like to you?

F: I told you what it looks like to me, what's it look like to you? Looks like a couple of people over there with their arms up in the air and like they're kinda kneel you might say. And it looks like someone over here with a hat on. What do you say?

S: I say the same.

M: There's two people with hats on.

F: There's two people sitting down and there's two people kneeling, huh?

S: (speaking to small dog under kitchen table) Is that you Rusty?

M: O.K.

F: That dog is . . .

M: Does that look like two birds, this look like a bird and that look like a bird?

F: What looks like a bird?

M: Like a chicken or something, see the legs here, arm or . . .

F: Like a hen.

S: (pats his lap and smacks his lips) Come here Russ (whistles).

F: I smell dog mess. Someone's got dog mess on their shoes. That's what I smell. What do you think?

M: What about, what this is?

F: Yeah.

M: Yeah I'll say it looks like two people. Two people there with a hat on.

F: What do you think? What do you think it looks like?

S: (gives big yawn)

F: Hum?

M: Does that look like two people to you? A person here and a person there and a person with a hat on here?

S: Yeah.

M: Yeah we all came to one agreement now.

WRITTEN FAMILY RESPONSES TO HOLTZMAN INKBLOT 19A

Father: The father circled various parts of the blot on the location sheet and wrote: Two people neeling with arms strehed out. Too people with hats on sitting.

The mother circled two areas of the blot and wrote: Two people kneeling. Two people with hat on.

The son circled no part of the blot and wrote: Two poeple.

Scores given for this set of responses were one 3 and three 4's.

APPENDIX D

TRANSCRIPTION OF TESTING SESSION WITH COMPARISON FAMILY

CONSENSUS RORSCHACH

Holtzman Inkblot Card 8A

KEY:

F: Father
M: Mother
D: Daughter

M: That looks like a scene looking through a frame or a window looking into a valley. Looks like looking through an arch with a panoramic view. Here's the sky in the back, the sky, the mountains and this would be the water that looks yellow and this is sand around . . . no, no a sea shore but by the shape it would be a river. Or if you put in perspective looks like a body of water.

F: You're looking at it this way?

M: No I'm just looking at it this way.

F: Oh I see the body of water running through it.

M: Yeah. It could be either, don't know what size body but in the view off in the distance could be an arch. That's what I see.

D: Say, Kansas or something with the wheat fields. Golden fields here . . .

M: Yeah 'cept there's no mountains . . .

D: I didn't say there were any mountains.

M: Oh.

D: You're out in the fields looking at this is the wheat fields, this is after the storm, the storm is clearing and it's just a sunset.

F: Would you say it's gonna be Laurence, Kansas clearing and this is a (unintelligible) over here?

D: Well . . . (laughter) I was gonna say it was after a bomb you know after that show. (A recent television broadcast: "The Day After" featuring life after a nuclear war.)

F: That's the last survivors two meeses.

D: Yeah roaches.

F: Roaches yeah . . . I can see a river here, this is a . . . more like thunder clouds, summer thunder clouds, that thing is maybe the sun going down in the background.

D: So you get the clouds.

F: So is it wheat or a river?

D: Well seeing how I've never seen wheat fields it does look like a river.

F: A river. Kansas has miles and miles and miles . . .

D: Yes, I've seen all the golden rod.

F: Yeah.

M: You know this is what I originally saw. You know when the dusk the sky gets all pink the dark clouds?

D: Uh huh.

M: And everything has a golden hue?

D: Um hum.

M: That's what that reminded me of.

F: The water?

M: Yes it has sort of a golden water . . . course I've never seen golden water before (laughs) except when . . . (unintelligible)

F: Oh or a river like the Mississippi.

D: Moonshine Creek.

M: Golden pond.

F: I can buy that.

D: Is it a river.

F: Are you asking or telling?

D: Asking.

F: Well I, I can see where mother is looking at a river there but I wouldn't want to infringe on her opinion. A field would extend to the horizon.

D: I go with the river.

M: Or a body of water.

D: Is it a river in the storm? Go with that?

(Non-participating family enters and leaves kitchen.)

D: Go with that?

F: What?

D: A river after the storm? Or with the storm clearing?

F: Yeah, yup.

M: Yeah just about dusk because haven't you come down coming back home and you can look over the water by the bridge the clouds look black and blue, dark blue . . .

D: Lavender.

M: And after the rain the sky gets a pink golden color or turns orange by dark orange and turns into the night color?

F: And the fields are . . .

M: (sings to tune "The Sound of Music") la la de la la!

F: I like the one's where we fight, where are those? We're being too nice . . . need to fight!

D: But we never fight (coyly).

M: Lord no! (obviously joking)

For Card 8A the family's written responses were as follows:

Father: A summer sunset silhouetting thunder clouds in isolated cells. In the foreground is a river--the water is burnished with a golden hue from the sun's reflection. There is also some similarity to an atomic bomb cloud.

The father has drawn lines from each component of his response to its respective location on the location sheet.

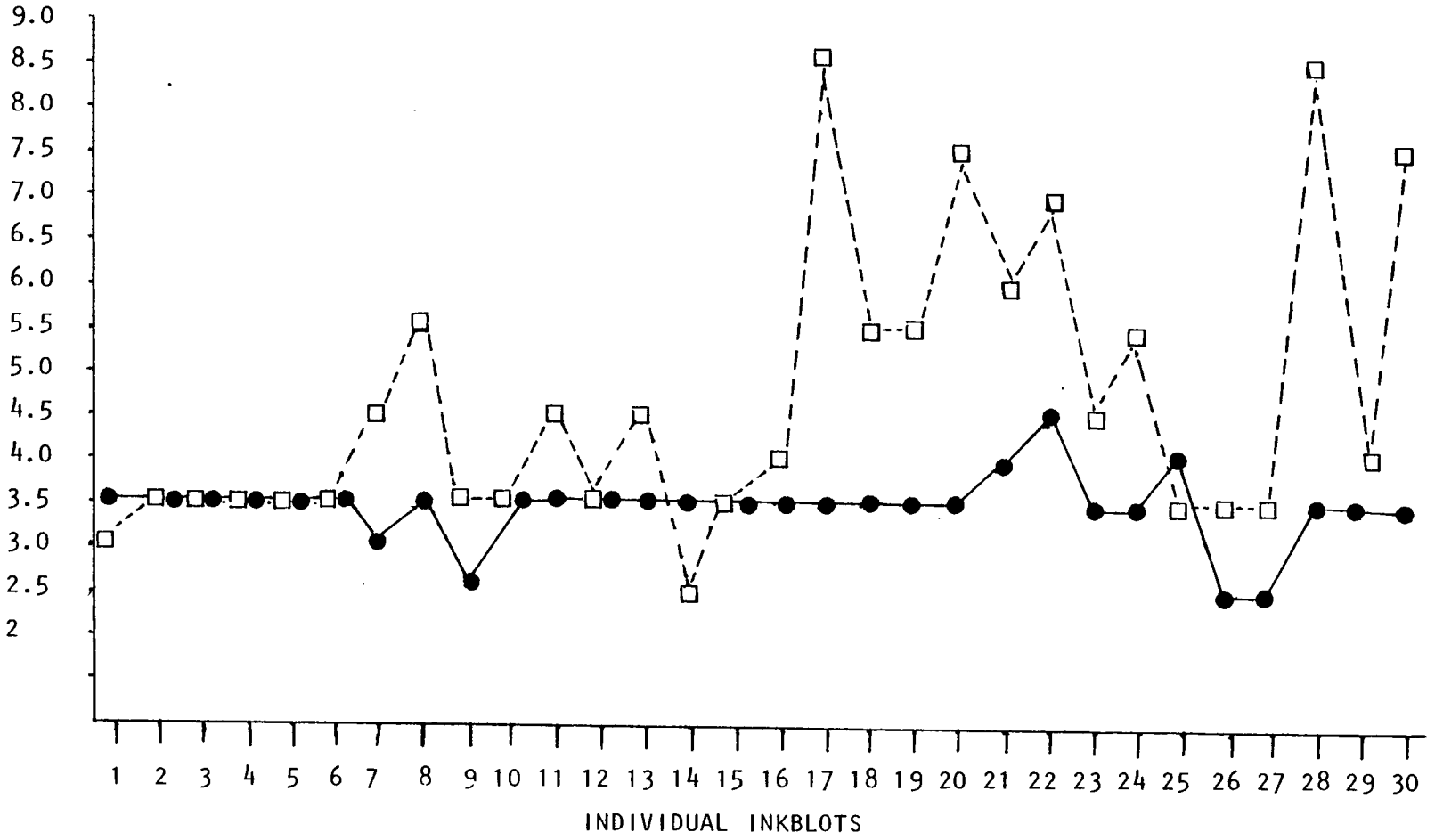
Mother: Looking down on a river or body of water turned golden at dusk with the dark clouds of night closing in.

Like the father, the mother has labeled her response.

Daughter: It looks like a picture of sundown over a body of water with stormy clouds around.

The daughter labels her response by writing right on the location sheet.

This set of responses was scored at Level 9 by all raters.



APPENDIX E

COMPARISON OF MEDIAN SCORES ASSIGNED TO EACH RESPECTIVE FAMILY'S RESPONSES TO INDIVIDUAL INKBLOTS

APPENDIX F

TABLE 1

CHARACTERISTICS OF FAMILIES STUDIED

Family	Target Offspring	Others in Home	Family Characteristics
Target	Male age 27	Mother; Father; Brother-in-law, 22; Sister, 20; Fraternal twins, 10	Family lives in lower middle-class suburb. Father is an electrician for automobile company with 9th grade education. Mother is housewife with 10th grade education. One son has killed himself with gunshot to head. Additional son is inpatient at psychiatric hospital diagnosed schizophrenic. Target offspring is reclusive, stays in room, helps with family chores, drives his own car. Catholic. Seven children living.
Comparison	Female age 26	Mother; Father; Sister, 29; Brother, 30	Family lives in attractive suburban home. Father is real estate attorney. Mother is a real estate agent and housewife. Couple used to operate liquor store. Target offspring is a college student majoring in interior design. Catholic. Seven children.

VITA

Joshua Williams was born in Brooklyn, New York on October 18, 1952 to Edward and Blossom Williams. He graduated from Midwood High School, in Brooklyn, in 1969.

In February, 1970, he entered Goddard College in Plainfield, Vermont, where he studied creative writing and political science. As an undergraduate student he was chief editor of his school's newspaper and also published several poems in magazines and journals. He also pursued his interest in politics through a one year United States Congressional Internship. He was graduated in 1973 with a Bachelor of Arts degree.

In February, 1974, he entered Columbia University in New York as a graduate student in English Literature. While there he wrote a Master's thesis entitled "Symmetrical Masking and Unmasking in Shakespeare's 'Much Ado About Nothing.'" He was graduated in 1976 with a Master of Arts degree.

In 1975, while employed as a public high school English teacher in New York City he developed an interest in clinical psychology. Following three years of ancillary educational and experiential preparation he entered the Doctoral Program in Clinical Psychology at The University of Tennessee, Knoxville, in September, 1978. The present work represents the culmination of his efforts in that program. After completing a clinical internship at the National Institute of Mental Health's Overholser Division of Training at Saint Elizabeth's Hospital

in Washington, D.C. he received the Doctor of Philosophy degree in June, 1984.

He is married to the former Laurie Kay Thompson. She is also a clinical psychologist.