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The Effect of Maternal Personality on the Personality Inventory for Children

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THE EFFECT OF MATERNAL PERSONALITY ON THE PERSONALITY INVENTORY FOR CHILDREN

by

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VITA

Claudia DeVries Beversluis was born November 19, 1952 in Chicago, Illinois. She is the daughter of Marvin and Mildred DeVries.

Her elementary education was obtained at Roseland Christian School in Chicago, and she graduated in 1970 from Chicago Christian High School in Palos Heights, Illinois. In 1974 Claudia Beversluis received the B.A. degree from Calvin College in Grand Rapids, Michigan.

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INTRODUCTION

The practice of using parents as sources of clinically important data is almost universal in medical and psychiatric settings where children are evaluated. Frequently a parent is the major source of information, and clinical decisions are reached primarily on the basis on the parent's report, rather than on the basis of direct observation. At other times, the clinician's direct interaction with the child follows a long interview with the parent. Clinicians who work with children are usually well aware that they must evaluate the parent as well as the child, and information from the parent is frequently recognized as less than "objective."

Increasingly, parents are being asked to complete standardized paper-and-pencil measures designed to provide information about the child's personality. The Personality Inventory for Children, or PIC (Wirt, Lachar, Klinedinst, & Seat, 1977), is a frequently used parent-report measure

of childhood psychopathology. The advantages of such an actuarially-based "standardized interview" include efficiency and normed comparisons. However, one of the disadvantages of the PIC and similar instruments is that the opportunity to evaluate the informant is not built into an actuarial test. The PIC, like the MMPI, has validity scales that detect general defensiveness or exaggeration, but these scales do not detect selective defensiveness or exaggeration. For example, a depressed mother may not exaggerate all psychopathological symptoms in her child, but she may emphasize depressive symptoms, hyperactive symptoms, or family pathology. An anxious mother might overemphasize her child's somatic problems while denying the delinquent aspects of his or her behavior. Since PIC profiles are currently being used to make diagnostic and treatment decisions, and to formulate clinical research groups, the potential for clinically meaningful bias on the PIC should be investigated. In an attempt to identify possible bias in the PIC, the present study examined the relationship between the PIC and the mother's personality.

REVIEW OF RELATED LITERATURE

The Personality Inventory for Children, or PIC (Wirt, Lachar, Klinedinst & Seat, 1977) is an actuarial parent-report measure of childhood psychopathology. The PIC was developed primarily at the University of Minnesota with the intention that it would be useful in evaluations of children just as the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951) had been useful in adult evaluations. The PIC consists of 600 items, and the parent, usually the mother, is asked to agree or disagree with each item as it relates to her child. Her responses are tabulated, resulting in scores for three validity and 16 personality scales. These scores form a clinical profile which is interpreted actuarially. Norms are available for both boys and girls ages six through 16, and provisional norms for children ages two through 5 are also available. The PIC is therefore a type of "structured interview" of the parent, which generates personality descriptions of the child.

Four areas of research are related to an investigation of the effect of maternal personality on the PIC: the accuracy of parental judgements, the influence of personality factors on person perception, response bias in actuarial tests, and related research with the PIC.

The Accuracy of Parental Judgements

The accuracy of parent reports has long been a concern of clinicians who work with children. The little research that has been done on the accuracy of parent recall has shown that, in general, parents are not accurate historians. Yarrow, Campbell, and Burton (1970) investigated the accuracy of parents' recollections of the nursery school years of their children. They asked mothers to recall information about their children anywhere from three to 30 years later, and found that mothers recalled factual information (e.g. height, weight) more accurately than personality information. Recall tended to be biased in the direction of social desirability and sex-role stereotypes, and also tended to be colored by perception of the current personality of the child. Robbins (1963) also found significant inaccuracies in both mothers' and fathers' recall of information about the early history of their three year old children. The inaccuracies were primarily in the direction of socially-approved child-rearing practices. Wenar and Coulter (1962)

interviewed mothers of clinic-referred children three to six years later and discovered that parental recall was the least accurate when parents were describing the events and attitudes which had led them to seek the clinic evaluation. They concluded that the emotional significance of the event adversely affected recall reliability. Evans and Nelson (1977), in a review of studies of parental recall, concluded that retrospective data tends to be primarily influenced by social desirability.

While the accuracy of parental recall may have implications for understanding developmental histories, the accuracy of a parent's judgement or description of current behaviors has broader implications for both the diagnostic interview and parent report tests. Sears, Maccoby, and Levin (1957) stress the essentially "normless" character of most parental judgements. That is, parents are often called upon to estimate their child's relative degree of progress or difficulty without wide exposure to other children of the same age. Frequently parents see their children as bright or dull, active or withdrawn, without the opportunity to compare them to their peers.

There have been few studies investigating the factors which influence parental judgements about their children. Cotler and Shoemaker (1969) asked mothers to watch their sons solve the Block Design subtest of the Wechsler

Intelligence tests, and then rate their performance on the task as they thought it would compare to the performance of other children. They found that mothers tended to rate their children's performances closer to the mean than they actually were, and that over- or under-estimation of actual achievement was related to other measures of overall acceptance of their children.

Social desirability also affects a parent's judgement of current behavior (Mash & Terdal, 1981). However, Mash and Terdal make the important point that parents' reports about their children frequently conform to the demand characteristics of the interview situation, and these demand characteristics do not always lead to socially desirable responses. If a clinic mother believes that treatment resources are scarce, she may exaggerate pathology. If she is eager to please a therapist in a post-treatment interview, she may exaggerate the progress that has been made without being aware of her exaggeration.

When a parent brings a child to a clinic for evaluation, this action usually implies a judgement of the child's behavior by the parent. Several studies have examined the accuracy of these parental judgements. The repeated finding that maternal perceptions of child behavior, and not actual child behavior, are the best discriminators between clinic-referred and non-referred children (Griest, Forehand, Wells,

& McMahon, 1980; Lobitz & Johnson, 1975; Sheperd, Oppenheim, & Mitchell, 1971) has led to investigations of the predictors of maternal perceptions. Sheperd, et al. (1971) matched 50 clinic-referred children with 50 non-referred children on the basis of the presence of a target behavior. They found that the clinic-referred children were not significantly more disturbed than the non-clinic children. Although there were socio-economic differences between the two groups, the authors felt that these differences were a result of control group selection rather than a determinate of clinic referral. The most important difference between groups was the attitude of the mothers toward themselves and their children. Non-clinic mothers reported that they felt their children's behavior was inevitable, while clinic mothers said they were both worried and irritated by their children's behavior. Clinic mothers were also more likely to report personal symptoms of nervousness, worry, and physical complaints.

Griest, Wells, and Forehand (1979) found that, in a clinic-referred population, the mother's perception of maladjustment in her child correlated better with her score on the Beck Depression Inventory than with observer ratings of her child's behavior. Depression was also a factor influencing mothers' descriptions of their children's general functioning and symptoms (Grunebaum, Cohler, Gallant,

& Kaufman, 1978). These authors suggested that ratings by depressed mothers "may well be colored by their gloomy and pessimistic view of life since there is a striking difference between the mothers' reports and the self-reports of the children..." (p. 225).

In another study (Griest, Forehand, Wells, & McMahon, 1980), non-clinic mothers' perceptions were highly correlated with independent observers' ratings of child behavior. However, within the clinic group, maternal perceptions of child behavior were related to an interaction between the child's behavior and maternal maladjustment, specifically as measured by the Trait Anxiety Inventory. Thus both maternal depression and anxiety are possible predictors of maternal perceptions of children. Ross (1974) has suggested that parent tolerance level plays a larger role than actual child behavior in determining who is referred to a psychological clinic.

Parents of clinic-referred children have been found to be significantly different from parents of non-clinic children on a number of personality measures, most notably on measures of marital satisfaction (Oltmanns, Broderick, & O'Leary, 1977) and on the MMPI (Lachar & Sharp, 1979). The two groups have been consistently different on the D (Depression) and Hy (Hysteria) scales of the MMPI (Lachar & Sharp, 1979), with equivocal differences on other

scales. Child guidance mothers have been found to have a higher number of significant elevations on the Hy (Hysteria) and Pd (Psychopathic deviate) scales (Marks, 1961; Wolking, Quast, & Lawton, 1966) and the D (Depression) and Pa (Paranoia) scales (Wolking et al., 1966). How these differences affect their descriptions of their children has not been investigated.

Personality and Interpersonal Perception

The literature exploring personality factors which influence interpersonal perception is too broad to be examined in detail here, but aspects of this research literature have relevance for an investigation of parental accuracy. Early research in this area operated under the assumption that interpersonal perceptual accuracy was an enduring trait, and factors which were associated with this trait could be isolated. Factors such as "good mental health" and high intelligence were most often correlated with interpersonal "accuracy," which was assumed to be consistent across all situations and for all judged persons (Schneider, Hastorf, & Ellsworth, 1979; Taft, 1955). However Taft, in a 1955 review of the "accuracy" research, found little evidence of a general interpersonal perceptual ability. Cronbach (1955) criticized the research in this area, suggesting that "accuracy" could never be established,

since there was no way to obtain a truly accurate criterion measure. He argued that much of what had passed as accuracy or error was in fact either statistical artifact or stereotype accuracy.

Taft's review and Cronbach's research critique marked the end of the search for "good judges," but sparked a renewed interest in factors which might contribute to systematic, identifiable bias in interpersonal perception. The search for these factors was not limited to the characteristics of individual judges, but expanded to include the characteristics of the judged person, the relationship between the persons, and the setting in which the judgement was made.

Much of the research on "bias" in person perception has taken place under the rubric of research on the dynamics of projection. Holmes (1968), in a review of research on projection, suggests that types of projection differ in two major ways: 1) whether the person projects his or her own trait or a different one, and 2) whether or not the individual is aware of possessing the trait which contributes to the projection. These two dimensions, and the resulting four types of projection, are shown in Table 1. This systemitization provides a useful way of discussing many of the recurring themes in person perception research.

Complementary projection, or the tendency of an

TABLE 1

Dimensions and Types of Projection
(reproduced from Holmes, 1968)

Subject awareness	Types of projection	
	Same trait projected	Different trait projected
S not aware of the trait in self	Similarity	Panglossian-Cassandran
S aware of the trait in self	Attributive	Complementary

individual to project onto another person a trait different from the one the individual knowingly possesses, has been supported largely by studies in which fearful subjects see others as threatening (for example, Feshbach & Singer, 1957; Hornberger, 1969; Murray, 1933). In each study, subjects projected a characteristic that was the complement of their own feelings, and which served to justify their own feelings. Bramel, Bell, and Margulis (1965) invoke the dynamics of cognitive dissonance to explain most cases of complementary projection. More recently, studies of complementary projection have been incorporated into the larger area of study of self-serving bias, or self-esteem motivated attribution (Bradley, 1978). A frequent finding in this area is that individuals tend to perceive people and events in ways that preserve their own self-esteem, and they are especially prone to do this in conditions which are public or in which there is high ego-involvement.

Research on the role of complementary projection, cognitive dissonance, or self-serving bias has not included the study of mother-child perception, but it is not difficult to extend the basic tenents onto the mother-child situation. For example, one might predict, on the basis of complementary projection, that mothers will describe their children in a way which justifies their own reactions: that frightened mothers will see their children as frightening or

anxious mothers will see their children as anxiety inducing.

In attributive projection, the individual tends to see others as like him or herself. The anxious mother, in this case, would see her child as anxious rather than as anxiety inducing, and the fearful mother would describe her child as being similarly scared. Murstein and Pryer (1950) originally called this process "attributive projection" but it has also been described by others as "assumed similarity" (Fielder, 1958; Shrauger & Altrocchi, 1964), "naive inference" (Cattell, 1951), and cognitive assimilation or reduction (Berkowitz, 1960).

There is substantial evidence to support the general concept of attributive projection (Holmes, 1968). In addition, personality variables and situational conditions which are most likely to result in attributive projection have been the object of research. For example, subjects with a high degree of self-acceptance are more likely to accept others and see them as self-accepting (Omwake, 1954; Suinn, 1961). Hostile subjects tend to describe others as being hostile more frequently than do non-hostile subjects (Leary, 1957). Hostility is also attributed by subjects more frequently to persons similar to them than persons not similar to them (Feshbach, Singer, & Feshbach, 1963). Edlow and Kiesler (1966) demonstrated that, when subjects are presented with strong evidence that they possess a

negative trait, they project the trait onto persons that they rate as desirable (Bramel, 1963). Again cognitive dissonance or self-serving attribution comes into play; the projection of the trait onto a friend or desirable person serves to decrease the threat of possessing the trait.

A third type of projection, similarity projection, occurs when someone is not aware of a trait in him or herself, but attributes this trait to others. This type of projection most clearly resembles Freud's (1956) original formulation: The individual protects his ego by seeing the trait in someone else and denying it in himself. Holmes (1968, 1978), after reviewing studies which compare "insightful" perceivers with "non-insightful" perceivers, concludes that support for similarity projection is lacking. However, the line between "insight" and "non-insight" is fuzzier in the clinic than it is in the laboratory, which is perhaps one reason why Freud's conception of projection has endured in the clinic. One might imagine, for example, a depressed mother who denies her own depression but describes her children as depressed.

And finally, Panglossian-Cassandrian projection is the label Holmes (1968) gives to the situation when a person projects onto another a trait different from the one he is not aware he possesses. This situation has generated little

research interest.

A simple correspondence between the personality of the perceiver and the nature of the content of the projection is seldom found in the literature. In spite of the convenient categorization of person perception research discussed above, research in this area is somewhat obscure both in its conceptualization and its execution. Many factors of presumed importance have not been investigated. For example, Shrauger and Altrocchi (1964) suggest that relationships between the perceiver and the perceived are important but ignored elements in the study of interpersonal perception, and call for studies involving these elements. Research on person perception and projection within the mother-child relationship would fall into this area.

Response Bias in Actuarial Measures

The influence of response bias on the results of an actuarial measure has been most intensively examined in regard to the Minnesota Multiphasic Personality Inventory, or MMPI (Hathaway & McKinley, 1951). Jackson and Messick (1958) were early critics of the MMPI, charging that the format of the test pressured respondents to acknowledge negative symptoms and characteristics, i.e., to describe themselves as having psychological problems. They claimed that response acquiescence, as compliance to this pressure

was labeled, contributed a large amount of variance to MMPI results (Jackson, 1967; Messick, 1967; Messick and Jackson, 1961). They suggested that this tendency to respond "true" to negative symptoms is independent of the content of the items. However, in the flurry of investigations which followed this allegation (Block, 1965; Frick, 1956; Weiss & Moos, 1965; Wiggins, 1962), acquiescence which was independent of item content failed to show up as a major source of test variance. Dahlstrom (1969), summarizing the controversy over response acquiescence and its resolution, explained that, when the respondent acknowledges selective symptoms, he is appropriately using the test to describe himself. Therefore acquiescence is not a source of distortion but the means by which valid information about personality is obtained.

Another response bias which, it was claimed, could substantially invalidate the MMPI, was called social desirability, or the tendency to deny symptoms in order to make a favorable impression. Again, the charge was made (Edwards, 1953; Fordyce, 1956) that social desirability contributed heavily to MMPI variance. Extensive research followed, which included the development of a social desirability scale (Edwards, 1957) and the administration of the MMPI to subjects who were instructed to obtain favorable results (e.g., Wiggins, 1959, 1966). The results

of these investigations paralleled the results of research on response acquiescence. That is, social desirability effects showed up on the original validity scales which were designed to detect unusual response sets, but failed to influence the clinical profile in a significant way (Dahlstrom, Welsh, & Dahlstrom, 1969).

As a result of these two major investigations into response style influences on the MMPI, a great deal was learned about how the MMPI functions in a clinical setting. Deviant response styles are no longer a major concern, largely because their effects can be detected with the standard MMPI validity scales. Selective denial or exaggeration, rather than a source of invalidating variance, has been accepted as the source of legitimate self-descriptors.

However, reassuring research on a self-report measure such as the MMPI cannot free users of actuarial parent-report measures from concern about response bias. The PIC, like the MMPI, has validity scales designed to detect unusual response styles such as generalized acquiescence or denial. Also like the MMPI, selective acquiescence or denial on the PIC reflects the personality of the respondent, and therefore may be a source of unwanted variance in a measure intended to generate descriptors about someone other than the respondent.

Related Research Using the Personality Inventory for Children

Lachar and Sharp (1979) developed a correlation matrix between maternal MMPI's and PIC profiles generated by the same mothers about their children. Their data was obtained from 218 mother-child pairs who were seen at Lafayette Clinic in Detroit, and for whom PIC's and maternal MMPI's were available. Several patterns of significant correlations are evident from the matrix. First, the PIC Family Relations (FAM) scale score is significantly correlated with most of the MMPI scales, a finding which the authors claim supports the validity of the FAM scale. Second, most MMPI scales were also significantly correlated with the PIC Somatic Concern (SOM) scale. Lachar and Sharp state that this relationship may obtain because disturbed mothers describe problems as physical (a limited type of systematic bias) or children of disturbed mothers are more likely to present with physical problems. Third, maternal depression (MMPI D scale) and anxiety (MMPI A scale) were significantly related to more PIC scales than were any other MMPI scales. Lachar and Sharp do not comment on this pattern, but one might attribute it to either a real relationship between the mothers and their children or to another limited type of response bias. That is, it is possible that mothers who are either depressed or anxious may tend to rate their

children as more disturbed, even though the children are not, in fact, more disturbed. Finally, Lachar and Sharp note that there are twice as many correlations between maternal MMPI's and PIC's for daughters as there are between maternal MMPI's and PIC's for sons. This, they argue, supports the notion that maternal personality does not produce a consistent bias on the PIC, because the bias would have to be similar for daughter and sons. However, since perceived similarity is an important variable in person perception (Schneider, Hastorf, & Ellsworth, 1979), it is a possibility that mothers might project more thoughts and feelings on to their daughters than their sons. Sex of the child may be an important variable in PIC response bias.

Pipp (1979) found 247 Lafayette Clinic adolescent patients for whom PIC's and adolescent MMPI's were available, and correlated their PIC scale scores with their MMPI scores. Correlations which one might expect to be significant, for example MMPI-Depression with PIC-Depression, were in fact only moderately so. Correlations between adolescent MMPI's and related PIC scales are lower than those reported by Lachar and Sharp (1979) between maternal MMPI's and related PIC scales. These respective correlations are from samples which are not identical in size or composition (e.g., Pipp's sample contains only adolescent PIC's while Lachar and Sharp

use adolescent and child PIC's). Therefore all they can do is raise the most tentative of suspicions about the influence of the mother's personality on the PIC. The present study compared maternal MMPI's, adolescent MMPI's, and mother-generated PIC's from the same population, so that the mother's perception of the adolescent could be compared directly with the adolescent's self-report, and the mother's influence on the PIC could be investigated.

Statement of Problem and Hypotheses

The present study was intended to investigate whether or not there were identifiable sources of variance on the Personality Inventory for Children, which could be traced, not to differences in the adolescents being described, but to the mothers' personalities. Therefore mothers who referred their adolescents for a psychological evaluation were asked to complete the PIC as well as to complete the MMPI on themselves. To provide a criterion measure of adolescent personality, the referred adolescents also completed the MMPI. Mothers and adolescents in a control group also completed these measures. It was asserted that mothers would project traits onto their children which were related to their own personalities, and that these projections would contribute unwanted variance to the PIC. Specifically, it was hypothesized that:

1. The self-descriptions (MMPI's) of adolescents who had been referred to a psychological clinic would differ from the self-descriptions of adolescents who had not been referred to the clinic.

2. Parent-descriptions (PIC's) of adolescents who had been referred to a psychological clinic would differ from the parent-descriptions of adolescents who had not been referred to the clinic.

3. The self-descriptions (MMPI's) of mothers of clinic referred adolescents would differ from the self-descriptions of the mothers of non-clinic referred adolescents.

4. Mothers' descriptions of their children (PIC's) would be best predicted by a combination of the children's self-descriptions and the mothers' self-descriptions.

5. Mothers' self-descriptions (MMPI's) would predict mothers' descriptions (PIC's) of daughters more strongly than they would predict mothers' descriptions of sons.

METHOD

Subjects

Subjects included two groups of 13 - 16 year old adolescents and their mothers.

Group A consisted of 40 adolescents who were referred for evaluation to a psychiatric or psychological outpatient clinic, along with their mothers. In order to be included in this group, the adolescent had to have been referred to the clinic at the request of or with the agreement of the mother.

Group B consisted of 40 adolescents who were general medical patients, along with their mothers. In order to be included in this group, the adolescent must have been seeking a routine check-up, or have been obtaining treatment for frequently-seen, non-chronic problems. Adolescents with serious or chronic medical conditions (e.g., diabetes, CNS dysfunction, venereal diseases), those in psychiatric treatment, and pregnant adolescents were not included.

All mother-adolescent pairs included in the study had been living together for at least two years at the time of the study. An equal number of male and female adolescents were recruited for each group.

Measures

The following measures were used in this study (see Appendix A):

The Personality Inventory for Children (PIC). The PIC (Wirt, Lachar, Klinedinst, & Seat, 1977) is an empiracally constructed actuarial instrument which can provide clinically relevant personality descriptions of children aged six through sixteen years. The instrument contains 600 statements to which the informant responds with a "true" or a "false." The answers are tabulated by hand or machine, providing scores on both validity and clinical scales.

There have been several studies of PIC test-retest reliability. The average reliability coefficient for the 16 profile scales was .86, which suggests that the scales are sufficiently stable for both research and individual use (Wirt et al., 1977). A rigorous concern for scale validity was built into the scale construction methodology, and it has been tested using a wide variety of criterion and concurrent measures (see Wirt et al., 1977 for a

summary of studies on the validity of each scale).

The standard PIC profile contains 16 scales (scale descriptions are adapted from Wirt et al., 1977):

The Lie scale (L). This scale is intended to identify a defensive response set. High scores suggest that the respondent ascribed the most virtuous of behavior to the child and denied commonly-occuring behavior problems.

The F scale (F). High scores on this scale suggest possible deviant response sets, such as deliberate or random responding because of an uncooperative attitude or poor reading ability.

The Defensiveness scale (DEF). This scale was constructed to measure the tendency of a parent to be defensive about her child's behavior during an evaluation. High scores suggest the presence of excessive defensiveness.

The Adjustment scale (ADJ). The Adjustment scale was designed as a screening device to identify children who are in need of psychological evaluation and as a general measure of poor psychological adjustment. A high score suggests the presence of psychological problems which are worthy of an evaluation.

The Achievement scale (ACH). This scale was constructed to assist in the identification of children

whose academic achievement is significantly below age expectation though they may possess adequate intellectual capacity. Thus a high scale score suggests possible academic achievement difficulties.

The Intellectual Screening scale (IS). High scores on this scale may be used to identify children who have intellectual impairment and for whom an individually administered intellectual evaluation is indicated.

The Development scale (DVL). High scores on this scale suggest deficits in motor coordination, language skills, or cognitive functions that may be reflected in poor academic performance.

The Somatic Concern scale (SOM). Elevation on this scale suggests frequent concern with physical symptoms that generally have a functional etiology or a functional component.

The Depression scale (D). Though few children are given a primary diagnosis of depression, it is a common component of psychological disturbance. This scale was designed to measure the importance of that component for a particular child, following the definition of depression in children formulated by the Group for the Advancement of Psychiatry (1966). High scores suggest the presence of depressive

symptoms.

The Family Relations scale (FAM). This scale measures family effectiveness and cohesion. High scores may indicate parental maladjustment, marital discord, unhappiness in the home, lack of appropriate discipline, or lack of respect for the rights of the child.

The Delinquency scale (DLQ). Significant elevation on this scale correctly identifies 95% of youths who are adjudicated delinquent from those who are not.

The Withdrawal scale (WDL). High scale scores identify children who avoid social contact, desire to remain isolated, have few friends, and distrust others.

The Anxiety scale (ANX). Elevation on this scale indicates that a child manifests symptoms of anxiety, such as limited frustration tolerance, exaggeration of problems or concerns, worries which reflect parental concerns, physiological correlates of anxiety, irrational fears and worries, and nightmares.

The Psychosis scale (PSY). This scale was constructed to discriminate children with psychotic symptomatology (Creak, 1961) from normal, behaviorally disturbed non-psychotic, and retarded children. High scores suggest the presence of psychotic symptoms.

The Hyperactive scale (HPR). Elevations on this scale identify children who display characteristics

frequently associated with the "Attention Disorder with Hyperactivity" (DSM III).

The Social Skills scale (SSK). This scale is composed of items that reflect effective social relations in childhood: ability to lead and to follow, level of active participation in organized activities, self-confidence and poise in social situations, and tact in interpersonal relations. High scores on this scale therefore reflect the presence of social difficulties.

The standard PIC profiles were further consolidated to provide three summary measures which were used in the statistical analyses. These three measures are an Externalization score, an Internalization score, and a Cognitive Development score. These three scores are based on a factor analysis of the PIC scales (Wirt et al., 1977). The Externalization score equals the mean T-score of the following PIC scales: DLQ, HPR, FAM. The Internalization score equals the mean T-score of the following PIC scales: SOM, D, WDL, ANX, PSY, SSK. The Cognitive Development score equals the mean T-score of the following scales: IS, ACH, DVL. These factors have been found to be significantly related to external behavioral correlates (DeHorn, 1977).

The Minnesota Multiphasic Personality Inventory (MMPI). The MMPI (Hathaway & McKinley, 1951) is a well-known

actuarial instrument which is frequently used to provide personality descriptions of adolescents and adults. The inventory provides scores on a variety of clinical and validity scales. A vast research literature exists which both investigates and uses the MMPI, including extensive research into its reliability and validity (see Dahlstrom, Welsh, & Dahlstrom, 1972, 1975).

In addition to the scales on the standard clinical profile, the Manifest Anxiety Scale (Taylor, 1953) was used in this study. Both adult and adolescent MMPI profiles were obtained. Adult profiles were determined using the standard scoring procedure (Hathaway & McKinley, 1951); adolescent profiles were obtained using age-appropriate norms (Dahlstrom et al., 1972).

Semantic Differential Scale. Mothers were asked to complete a Semantic Differential Scale (based on Osgood, Suci, & Tannenbaum, 1957, and as presented in DeWolfe, DeWolfe, & McNulty, 1972). Mothers were asked to judge one animal (to acquaint them with the scale), the referred child, and themselves. Based on their answers, two scores were obtained. The Identification score was calculated from the differences between the mother's ratings of herself and her ratings of her child. (Thus a high Identification score indicates weak identification, while a low score indicates stronger identification.) The Evaluation

score represented the mean value of the mother's ratings of her child on a subset of bipolar dimensions. (Thus a high Evaluation score indicates a more positive rating than does a low Evaluation score.)

Demographic Questionnaire. A questionnaire was used to obtain information about the age, education, family structure, and socio-economic status of each participant.

Procedure

Study participants for Groups A and B were obtained from outpatient medical and psychiatric clinics in both Detroit, Michigan and Grand Rapids, Michigan. Subjects were recruited between September, 1981 and January, 1983. Generally, both mother and adolescent appeared together at these clinics and were introduced to the study by clinic personnel. All adolescent-mother pairs who appeared to meet study inclusion criteria were introduced to the study. The potential participants were told that subjects were being recruited for a research study on mothers and adolescents, that participation was voluntary and extraneous to the evaluation, and that participation would not affect their treatment. Approximately fifteen percent of the medical clinic patients who were approached became involved in the study, while approximately forty percent of the psychiatric patients participated. Interested mother-child

pairs either left their names and phone numbers with the clinic personnel or contacted the experimenter directly. The experimenter then contacted the mother and adolescent to explain the study in more detail, determine if the subjects were appropriate for the study, and make arrangements for their participation. Most of the subjects came to the clinic to complete the test materials, although in several instances individuals completed the materials in their homes. Mothers and adolescents were both asked to complete the consent forms (see Appendix B). Adolescents completed the MMPI and mothers completed the MMPI, PIC, and Semantic Differential Scale. Demographic information was obtained in a short interview with the mother. Mothers and children completed the test materials in separate rooms or at different times. When all materials were completed, the mother and adolescent were paid $15.00 for their participation in the study. When requested, individual feedback was provided to the participant.

Only mother-adolescent pairs who produced valid MMPI profiles were included in the study. An MMPI profile was not considered valid if the F scale T-score was above 85. In the medical group, one mother and three adolescents produced invalid MMPI profiles; in the psychiatric group, five adolescents produced invalid MMPI profiles. No corresponding cutoff score was established for the PIC profiles,

because a high score was assumed to be a result of response style rather than an inability to read or to understand the items. High F scale scores are not indicative of invalidity in the PIC like they are in the MMPI (see interpretive statements in Lachar & Gdowski, 1979). In addition, mothers who tended to produce invalid results would already have been eliminated on the basis of their MMPI F scale.

RESULTS

Sample Characteristics

The demographic characteristics of each group and of the entire population are presented in Tables 2 and 3. The clinic (psychiatric) and control (medical) groups do not differ significantly on most of the basic demographic variables measured. However, control group adolescents are slightly younger than clinic adolescents, $t(78) = 3.26$, $p < .01$, and their mothers are also younger than their clinic counterparts, $t(78) = 2.52$, $p < .05$.

The average adolescent participant in this study was 14 years old and a ninth grader. The average mother was married with three children, and had a year of post-high school education. Only one participant was in a special education placement (E.I.), and only two adolescents had a history of legal difficulty. Both the Detroit and Grand Rapids area participants closely resembled the typical patient populations of the respective clinics in demographic makeup. Significantly more Black subjects were from Detroit

TABLE 2

Demographic Characteristics - Part One

	Clinic		Control		Total
	Male	Female	Male	Female	Group
Adolescent age (years)	15.5	15.1	14.7	14.6	14.9*
Number of older sibs	.70	1.10	1.00	1.80	1.15
Number of younger sibs	1.45	.75	1.15	.95	1.08
Grade level	9.60	9.45	9.15	9.40	9.40
Mother's age	40.35	43.60	39.25	37.75	40.24*
Mother's educational level	12.90	12.70	12.85	13.15	12.90
Number of children of mother	3.30	3.40	2.85	3.05	3.15

Note. Clinic Group: n = 40; Control Group: n = 40.

* Clinic vs. Control group difference is significant at $p < .05$.

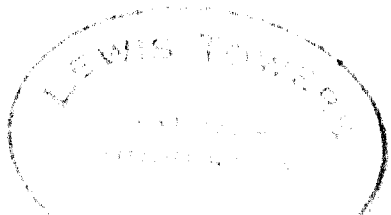


TABLE 3

Demographic Characteristics - Part Two

	Clinic Group		Control Group		Total
	Male	Female	Male	Female	Group
Source					
Detroit	9	8	10	13	40
Grand Rapids	11	12	10	7	40
Race					
Black	8	7	6	7	28
White	12	13	14	13	52
Mother's Employment					
Professional	1	0	1	1	3
Semi-professional	2	4	1	3	10
Skilled Labor/Clerical	5	6	11	11	33
Unskilled Labor	2	0	2	0	4
Unemployed	10	10	5	5	30
Spouse's Employment					
Professional	1	1	0	1	3
Semi-professional	3	5	2	3	13
Skilled Labor/Clerical	6	6	8	7	27
Unskilled Labor	0	3	3	2	8
Unemployed	0	1	0	2	3
Not Applicable	10	4	7	5	26

Note. Chi-Square analyses revealed no significant differences between male and female or between clinic and control groups for any of these variables. Clinic Group: n = 40; Control Group: n = 40.

than from Grand Rapids, Chi-square (1) = 30.94, $p < .001$, and Detroit area subjects were more likely to be unmarried than were Grand Rapids area subjects, Chi-square (1) = 26.64, $p < .001$). These differences, however, were not critical to subsequent data analyses.

Adolescent Self-descriptions

Clinic-referred adolescents were compared to non-clinic referred adolescents using their self-descriptions, i.e., their T-scores on the MMPI validity and clinical scales. T-score comparisons were done using t-tests, and the results are presented in Table 4. Of the 13 scale comparisons, only two, D (Depression) and Pd (Psychopathic deviance) were significant at the $p < .05$ level. Three additional scales, Hy (Hysteria), Sc (Schizophrenia), and Ma (Mania), show a trend toward difference in the two groups. In addition, the number of MMPI T-scores above 70 T did not differ significantly between the groups. Average male and female MMPI profiles are presented in Figures 1 and 2. It was hypothesized that adolescent self-descriptions would be significantly different between the clinic and control groups. Since only two of the ten clinical scales demonstrate significant differences, this hypothesis is not supported.

TABLE 4

Clinic and Control Adolescents' MMPI Results

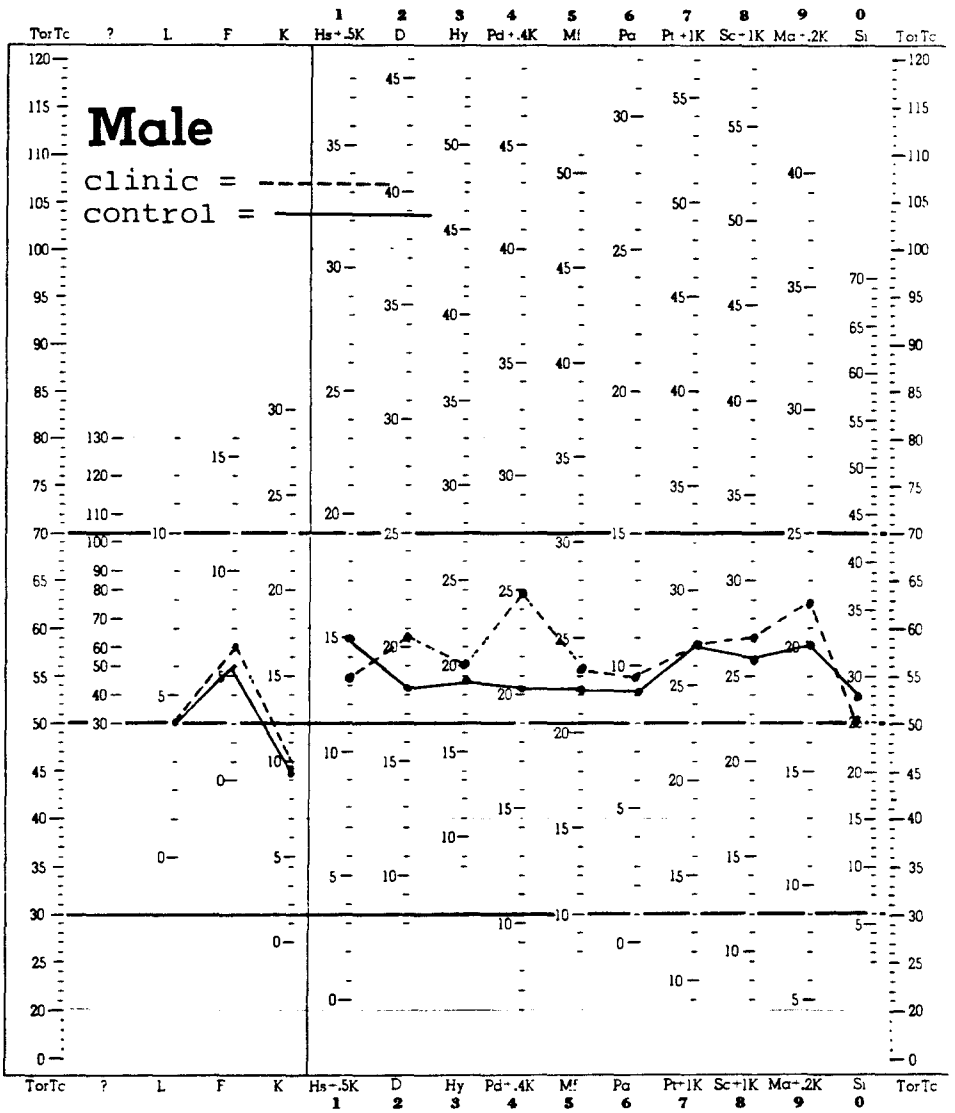
MMPI scale	Clinic[a] M	Clinic[a] SD	Control M	Control SD	t[b]	p
L	48	7.7	47	9.0	.69	n.s.
F	60	13.0	58	12.8	.88	n.s.
K	44	8.4	46	9.1	-1.18	n.s.
Hs	58	12.3	56	12.6	.76	n.s.
D	60	12.3	54	12.6	2.35	.01
Hy	57	9.5	54	10.0	1.58	.06
Pd	66	13.1	56	12.6	3.57	.001
Mf	53	11.2	51	11.7	.45	n.s.
Pa	56	10.3	53	10.8	1.20	n.s.
Pt	59	12.7	56	11.2	1.03	n.s.
Sc	61	12.7	58	12.4	1.38	.09
Ma	62	10.2	59	10.0	1.51	.07
Si	52	10.1	51	12.7	.06	n.s.

[a]Clinic group: $n = 40$; Control group: $n = 40$.

[b]Scales L, F, and K were compared using two-tailed t-tests; all other scales were compared using one-tailed t-tests.

FIGURE 1

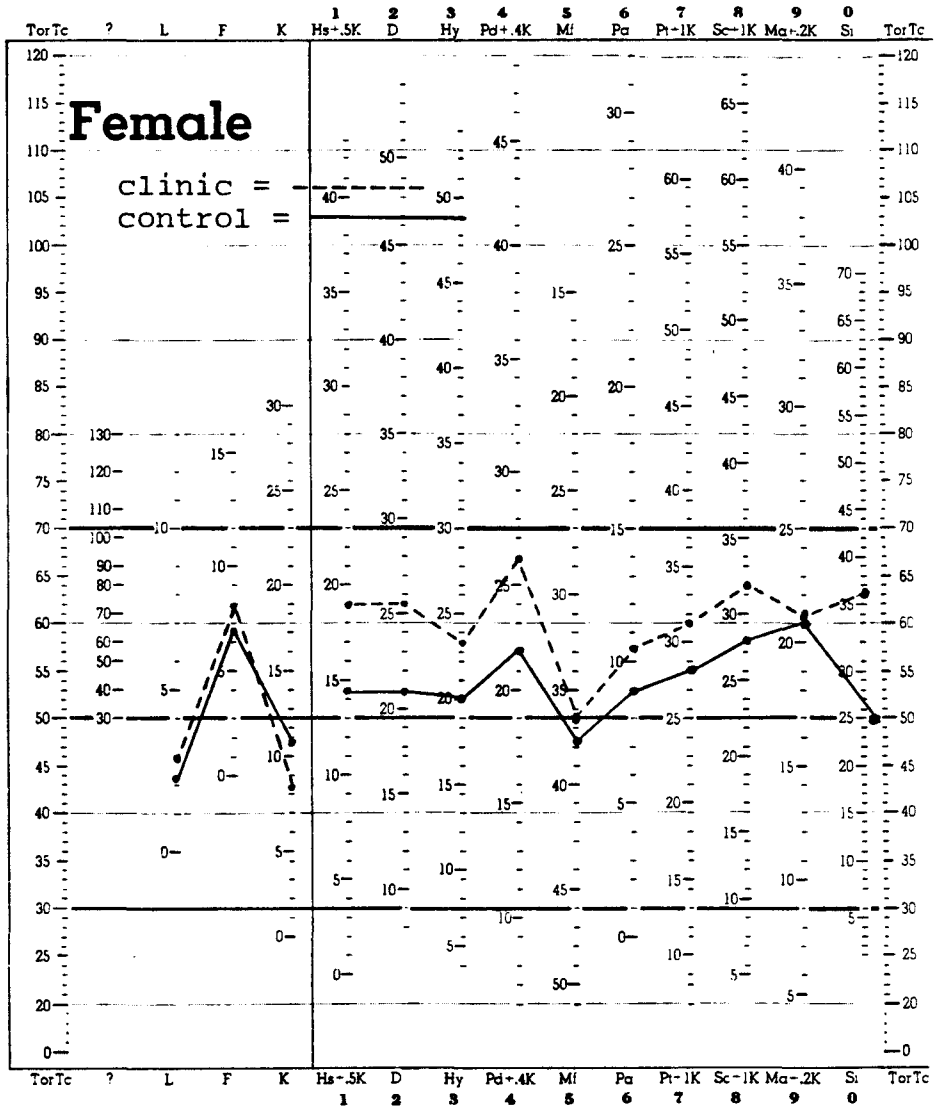
Average MMPI Profiles for Clinic and Control Male Adolescents



Note. Clinic group: n = 20; Control group n = 20.

FIGURE 2

Average MMPI Profiles for Clinic and Control Female Adolescents



Note. Clinic group: n = 20; Control group: n = 20.

Mother-Descriptions of Adolescents

In contrast to the above results, mother-descriptions of adolescents who had been referred to the clinic differed significantly from the mother-descriptions of adolescents who had not been referred, which provides support for the second hypothesis of this study. Significant differences were found between groups on most of the PIC scales. The only scale which was not sigificantly different between groups was the IS scale. The number of PIC T-scores above 70 T was greater, $t(78) = 7.35$, $p < .001$, one-tailed test, in the clinic-referred group than in the control group. Table 5 presents the means and standard deviations of PIC scale scores for the clinic and control populations, and Figures 3 and 4 present average PIC male and female profiles.

Mother Self-Descriptions

When mother self-descriptions (i.e., mother's MMPI scale T-scores) are compared between the clinic and control groups, only three scales, Hs (Hypochondriasis), Hy, and MAS (Manifest Anxiety), show significant differences. Two scales, D and Si (Social Isolation), demonstrate a trend toward differences between groups. There was no difference between groups in the number of significantly elevated clinical scales. Because three out of the ten clinical scales are significantly different between groups, the

TABLE 5

Clinic and Control PIC Results

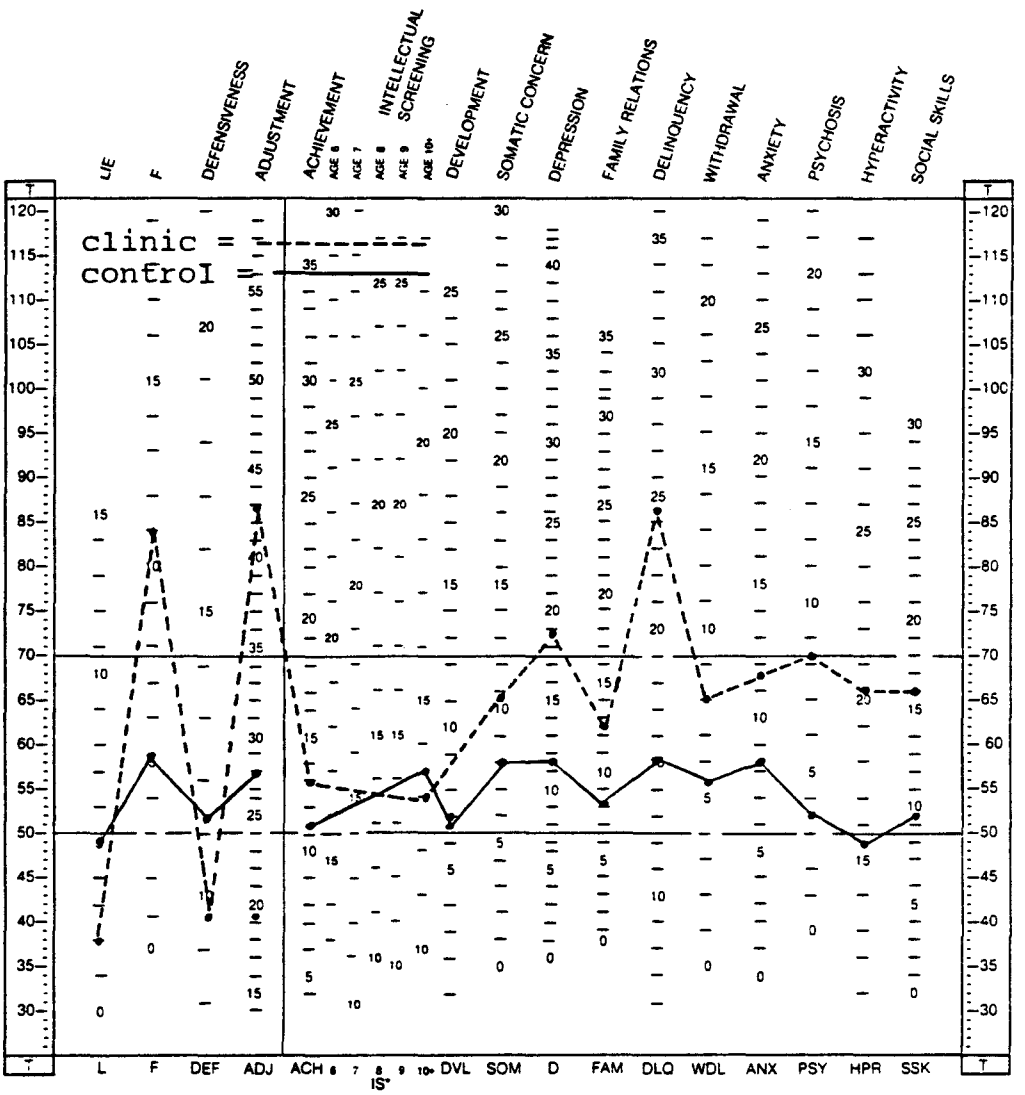
PIC scale	Clinic[a] M	Clinic[a] SD	Control M	Control SD	t[b]	p
L	41	9.8	50	9.6	-4.22	.001
F	80	16.6	55	15.5	7.06	.001
DEF	45	11.5	51	9.2	-2.81	.01
ADJ	86	14.5	56	12.5	9.94	.001
ACH	58	11.1	49	10.2	3.83	.001
IS	57	15.3	53	11.2	1.45	.08
DVL	56	10.4	48	9.7	3.59	.001
SOM	66	16.1	55	12.2	3.61	.001
D	72	11.3	56	12.6	5.85	.001
FAM	62	10.7	54	12.7	3.12	.01
DLQ	87	19.3	58	11.3	8.19	.001
WDL	65	12.5	57	13.6	2.91	.01
ANX	66	12.0	55	11.0	4.10	.001
PSY	69	15.2	52	10.3	5.99	.001
HPR	64	18.2	48	9.2	4.87	.001
SSK	66	15.8	50	9.3	5.35	.001

[a]Clinic group: $n = 40$; Control group: $n = 40$.

[b]Scales L, F, and DEF were compared using two-tailed t-tests; all other scales were compared using one-tailed t-tests.

FIGURE 3

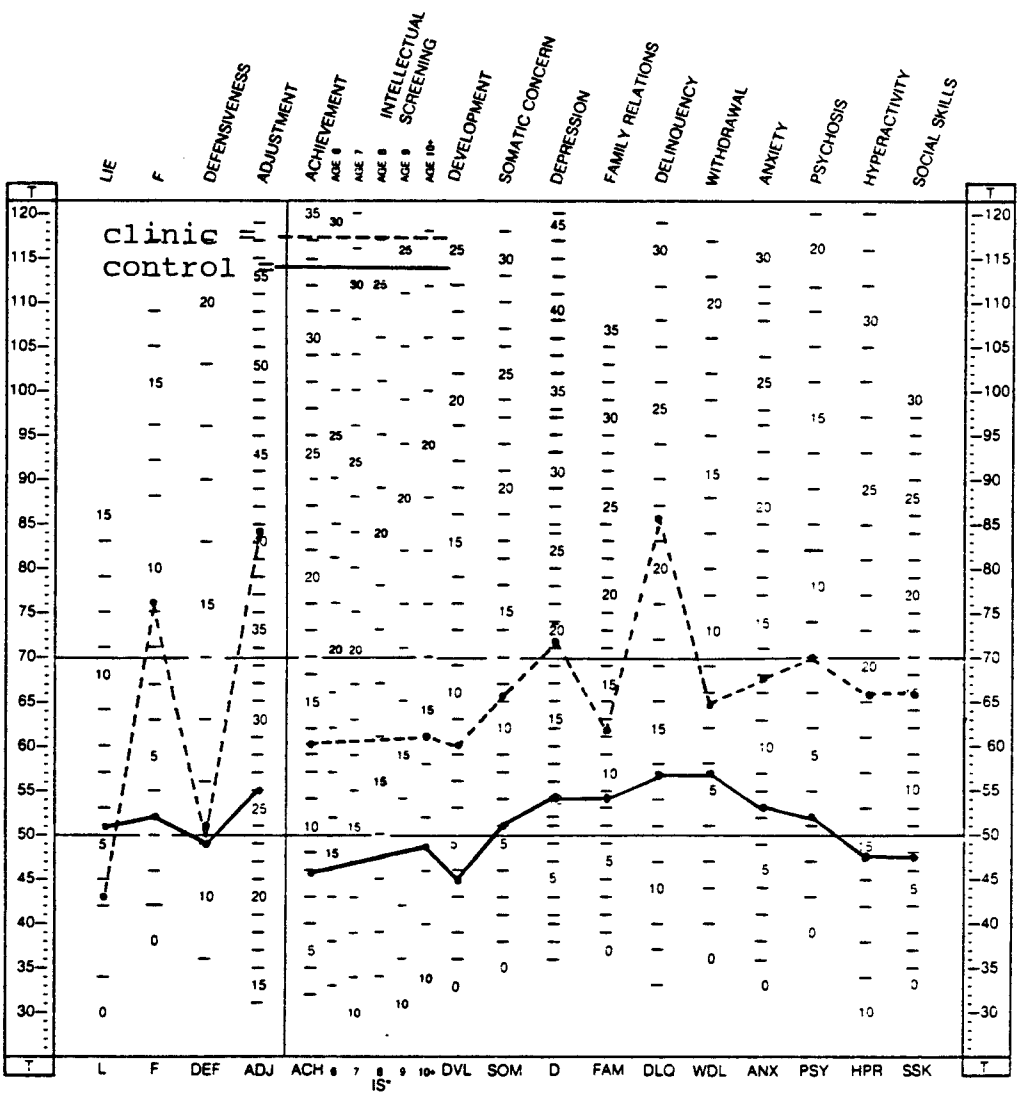
Average PIC Profiles for Clinic and Control Male Adolescents



Note. Clinic group: n = 20; Control group: n = 20.

FIGURE 4

Average PIC Profiles for Clinic and Control Female Adolescents



Note. Clinic group: n = 20; Control group: n = 20.

third hypothesis of the study receives mild support. Clinic mothers are not strikingly more disturbed than control mothers, but they appear to be more anxious (MAS) and to demonstrate more "neurotic" traits (Hs and Hy). As the results presented in Table 6 indicate however, the average MMPI profile of clinic mothers is not within the range of psychopathology.

The Relationship between Mother-Descriptions of Adolescents and Maternal and Adolescent Personality

Correlations between the maternal and adolescent MMPI's and the PIC are presented in Tables 7, 8, and 9. Table 7 gives the significant correlations between PIC scales and maternal MMPI scales. The high number of moderate correlations between the scales of these measures demonstrate the close relationship between the mother's personality and her descriptions of her child. Several patterns can be seen in this table. The PIC cognitive scales (ACH, IS, DVL) correlated significantly with only one maternal MMPI scale (D). In contrast, six of the PIC scales (F, SOM, D, FAM, WDL, ANX) correlated significantly with more than half of the maternal MMPI scales. The maternal MMPI scales F, Hs, D, Hy, Pt, and MAS correlated with at least half of the PIC scales. Most of the PIC

TABLE 6

Clinic and Control Mothers' MMPI Results

MMPI scale	Clinic[a] M	Clinic[a] SD	Control M	Control SD	t[b]	p
L	52	8.5	50	5.7	1.66	.1
F	57	9.4	54	8.0	1.35	n.s.
K	55	9.1	55	8.3	-.24	n.s.
Hs	58	11.3	53	8.7	1.97	.03
D	59	11.6	55	12.9	1.50	.07
Hy	63	9.9	58	8.8	2.16	.02
Pd	63	11.6	61	12.1	.73	n.s.
Mf	47	9.5	48	9.0	-.71	n.s.
Pa	59	9.1	57	10.2	.74	n.s.
Pt	56	9.6	54	10.9	1.06	n.s.
Sc	59	11.1	57	11.9	.69	n.s.
Ma	56	9.2	54	9.5	.96	n.s.
Si	57	9.6	53	10.2	1.54	.07
MAS	56	10.5	51	12.8	1.87	.03

[a]Clinic group: $n = 40$; Control group: $n = 40$.

[b]Scales L, F, and K were compared using two-tailed t-tests; all other scales were compared using one-tailed t-tests.

TABLE 7

Significant Correlations between

PIC and Mother MMPI Scales

PIC scale	Mothers' MMPI scale L	F	K	Hs	D	Hy	Pd
L			.20				
F	.20	.35*		.29*		.28*	.22
DEF							
ADJ	.22	.26*		.25	.19	.26*	
ACH					.23		
IS							
DVL					.21		
SOM		.43*	-.23	.33*	.24	.40*	.25
D		.30*	-.21	.34*	.22	.27*	.19
FAM		.48*	-.25	.31*	.35*	.34*	.38*
DLQ	.21	.24		.27*		.30*	
WDL		.22		.23	.30*		.20
ANX		.22		.35*	.23*	.31*	
PSY							
HPR							
SSK					.28*		
EXTERNAL		.30*		.28*	.22*	.36*	.21
INTERNAL							
COG DEV							

Note. Correlations are based on entire population of subjects: N = 80.

*p < .01; all other correlations significant at p < .05.

TABLE 7 - Continued

Significant Correlations between

PIC and Mother MMPI Scales

PIC scale	Mothers' MMPI scale Mf	Pa	Pt	Sc	Ma	Si	MAS
L	.23						
F		.23		.27*	.31*		.22
DEF							
ADJ			.21				.21
ACH							
IS							
DVL							
SOM		.24		.28*	.38*		.31*
D		.24	.23			.19	.36*
FAM		.27*	.38*	.34*	.34*	.20	.41*
DLQ							
WDL		.28*	.29*	.28*		.28*	.33*
ANX	-.35*		.24*	.23			.29*
PSY	-.31*						.27*
HPR							
SSK	-.29*		.20			.27*	
EXTERNAL		.21	.21				.23
INTERNAL-COG DEV	-.25	.25	.27*	.26*		.24	.38*

Note. Correlations are based on entire population of subjects: $N = 80$.

*$p < .01$; all other correlations significant at $p < .05$.

and maternal MMPI scales which correlated with each other are scales measuring " internalizing" or "neurotic" traits such as anxiety, somatization, or depression. Thus the strongest relationships evident in the PIC - maternal MMPI correlation matrix are the relationships between a mother's own internalized distress and her tendency to report internalized distress in her child.

Correlations between the adolescent MMPI scales and the PIC are presented in Table 8. Since both of these measures are used to describe the personality of the same individual, one would expect correlations between similar scales to be significant. This is, in fact, the case for many of the scales with related content: PIC-D with MMPI-D, PIC-DLQ with MMPI-Pd, PIC-ANX with MMPI-Pt, and PIC-WDL with MMPI-Si. Other scales with related content are not significantly correlated: PIC-SSK with MMPI-Si, and PIC-PSY with MMPI-Sc. The adolescent MMPI scores which differentiated the clinic and control groups (D and Pd) also had the highest number of significant correlations with the PIC.

In contrast to the high number of significant correlations between the PIC and the MMPI's of mothers and adolescents, there were few correlations between the adolescent and maternal MMPI's themselves (Table 9). The mother's F scale is correlated with some of the adolescent's

TABLE 8

Significant Correlations between

PIC and Adolescent MMPI Scales

PIC scale	Adolescents' MMPI scale L	F	K	Hs	D	Hy	Pd
L	.20	.19					-.23
F					.33*	.28*	.38*
DEF							
ADJ					.32*		.54*
ACH				.21	.32*		.21
IS							
DVL				.27*	.28*		
SOM				.30*		.19	
D					.30*	.31*	.48*
FAM					.20	.20	
DLQ		.23	-.20		.34*	.20	.51
WDL	.20	.25			.33*		.25
ANX					.21	.24	.36*
PSY	.24	.19			.32*	.24	.39*
HPR	.24				.24		.25
SSK	.22				.37*	.30*	.40*
EXTERNAL					.36*	.23	.45*
INTERNAL	.19	.21			.36*	.30*	.43*
COG DEV							

Note. Correlations are based on entire population of subjects: $N = 80$.

*$p < .01$; all other correlations significant at $p < .05$.

TABLE 8 - Continued

Significant Correlations between

PIC and Adolescent MMPI Scales

PIC scale	Adolescents' MMPI scale Mf	Pa	Pt	Sc	Ma	Si
L	-.20				-.26*	
F		.23	.24	.20		
DEF	-.28*					
ADJ		.25	.31*	.28*	.32*	
ACH			.28*	.21	.19	.21
IS						
DVL			.21			
SOM						
D		.27*	.27*	.26	.28*	
FAM						
DLQ		.24	.27*	.28*	.29*	
WDL		.29*	.26*	.23	.20	.35*
ANX			.33*	.22	.22	
PSY	.20	.22	.18		.22	
HPR						
SSK		.29*	.21	.20	.23	
EXTERNAL			.23	.22	.24	
INTERNAL		.26*	.30*	.27*	.26	.22
COG DEV						

Note. Correlations are based on the entire population of subjects: N = 80.

*p < .01; all other correlations significant at p < .05.

TABLE 9 - Continued

Significant Correlations between

Maternal and Adolescent MMPI Scales

Maternal MMPI scale	Adolescent MMPI scale					
	Mf	Pa	Pt	Sc	Ma	Si
L						
F		.20	.20	.33*	.31*	
K						
Hs						
D						
Hy						
Pd		.20				
Mf						
Pa		.22				
Pt					.20	
Sc		.24		.20		
Ma				.22		
Si						
MAS					.24	

Note. Correlations are based on entire population of subjects: $N = 80$.

*$p < .01$; all other correlations significant at $p < .05$.

TABLE 9

Significant Correlations between

Maternal and Adolescent MMPI Scales

Maternal MMPI scale	Adolescent MMPI scale						
	L	F	K	Hs	D	Hy	Pd
L							
F		.25		.28*			
K							
Hs			-.21				
D							
Hy			-.20				
Pd							
Mf				.21			
Mf							
Pa							
Pt							
Sc							
Ma							
Si							
MAS			-.22				

Note. Correlations are based on entire population of subjects: $N = 80$.

*$p < .01$; all other correlations significant at $p < .05$.

MMPI scales, but otherwise there appears to be little relationship between the two measures.

In order to further understand the relationships between the maternal and adolescent MMPI's and the PIC, multiple regression equations were developed for each PIC scale and summary score. The multiple regression analyses were done according to step-wise procedures. Because the PIC and the adolescent MMPI are both measuring the personality of the adolescent, it was assumed that, in the ideal case, adolescent MMPI scores should be highly correlated with, and therefore major predictors of, PIC scores. Therefore, the adolescent MMPI scales were added to the regression equations for each PIC scale first, before any maternal MMPI scales were added. All of the adolescent MMPI scales were added together, which represented the first step in the step-wise analyses. Only those maternal MMPI scales which added significantly, ($p < .05$), to the PIC scale variance were added to the regression equation after the adolescent MMPI scales. The multiple regression analyses were thus designed to answer the question: Does the mother's MMPI, or a subset of MMPI scales, contribute any variance, over and above that contributed by the adolescent's MMPI, to a given PIC scale?

The results of the multiple regression analyses for each PIC scale and summary score are presented in Table 10. As this table demonstrates, maternal MMPI scales contribute significantly to PIC scale variance in 13 of the 16 PIC scales, and in two of the three summary scores. The maternal MMPI does not significantly predict the variance of PIC scales ACH, DVL, and HPR. In several scales (F, SOM, FAM) the maternal MMPI accounts for more scale variance than does the adolescent MMPI, even when the shared variance is ascribed to the adolescent MMPI. The PIC Internalization scales appear to be most consistently related to maternal personality, which parallels the pattern seen earlier in the correlations between maternal MMPI and PIC. The most consistent maternal MMPI predictors also appear to be "internalizing" scales, i.e., MAS, Hy, Hs, and perhaps Mf. Again, from these results it appears that a mother's tendency to describe internalized distress in her child may be affected by her own level of anxiety and distress. The results of the multiple regression analyses on the overall group support the hypothesis that mothers' descriptions of their children are best predicted, not by child personality alone, but by a combination of adolescent and maternal self-descriptions.

TABLE 10

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Combined Groups

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
L	AMMPI[a]	.255						
	PMMPI-Mf[b]	.304	.050	.285	.132	4.65	1,65	.05
F	AMMPI	.242						
	PMMPI-F	.355	.112	.919	.273	11.29	1,65	.01
	PMMPI-Ma	.410	.005	.579	.237	5.96	1,64	.05
	PMMPI-L	.504	.094	.934	.271	11.90	1,63	.01
	PMMPI-Hs	.561	.057	.571	.201	8.09	1,62	.01
	PMMPI-Mf	.594	.033	-.475	.213	4.98	1,61	.05
DEF	AMMPI	.253						
	PMMPI-Hy	.314	.061	.337	.137	5.78	1,65	.05
ADJ	AMMPI	.432						
	PMMPI-L	.488	.057	.680	.253	7.24	1,65	.01
	PMMPI-Hy	.544	.055	.528	.190	7.76	1,64	.01
ACH	AMMPI	.235						
	none	-	-	-	-	-	-	-

TABLE 10 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Combined Groups

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
IS	AMMPI	.246						
	PMMPI-D	.290	.044	.341	.169	.406	1,65	.05
DVL	AMMPI	.247						
	none	-	-	-	-	-	-	-
SOM	AMMPI	.151						
	PMMPI-F	.297	.146	.788	.214	13.49	1,65	.001
	PMMPI-Hy	.363	.066	.459	.179	6.59	1,64	.05
	PMMPI-Ma	.438	.075	.511	.176	8.45	1,63	.01
D	AMMPI	.341						
	PMMPI-MAS	.457	.116	.437	.117	13.84	1,65	.001
FAM	AMMPI	.145						
	PMMPI-F	.348	.203	.750	.167	20.30	1,65	.001
DLQ	AMMPI	.393						
	PMMPI-Hs	.459	.065	.563	.201	7.84	1,65	.01
	PMMPI-L	.515	.056	.715	.262	7.45	1,64	.01

TABLE 10 - Continued

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Combined Groups

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
WDL	AMMPI	.264						
	PMMPI-MAS	.379	.115	.417	.120	12.02	1,65	.001
ANX	AMMPI	.262						
	PMMPI-Hs	.378	.115	.441	.127	12.02	1,65	.001
	PMMPI-Mf	.467	.090	-.452	.138	10.80	1,64	.01
PSY	AMMPI	.312						
	PMMPI-Mf	.409	.097	-.583	.179	10.65	1,65	.01
	PMMPI-MAS	.456	.047	.310	.131	5.58	1,64	.05
HPR	AMMPI	.301						
	none	-	-	-	-	-	-	-
SSK	AMMPI	.326						
	PMMPI-Mf	.418	.092	-.546	.171	10.23	1,65	.01
	PMMPI-D	.468	.051	.293	.119	6.11	1,64	.05

TABLE 10 - Continued

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Combined Groups

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
Exter-nali-zation	AMMPI	.391						
	PMMPI-F	.482	.091	.377	.157	11.40	1,65	.01
Inter-nali-zation	AMMPI	.299						
	PMMPI-MAS	.428	.130	.359	.093	14.76	1,65	.001
	PMMPI-Mf	.470	.042	-.273	.121	5.05	1,64	.05
Cog Dev	AMMPI	.231						
	none	-	-	-	-	-	-	-

Note. Combined groups: N = 80

[a]AMMPI refers to all adolescent MMPI scales, added as a single step to the step-wise analyses.

[b]PMMPI refers to maternal MMPI.

Clinic vs. Control Group Differences in the Relationship between PIC and Maternal MMPI Scales

Previous studies (e.g., Griest, Wells, & Forehand, 1979) have demonstrated that the mother's personality contributed heavily to her ratings of the child among clinic-referred populations but not among normal, or control populations. In order to investigate this possibility for this sample, separate multiple regression analyses were conducted for the control and clinical groups. The procedures described above were used to test whether or not maternal MMPI scales contributed significantly to the variance of each PIC scale and summary score. Results of these analyses are presented in Tables 11 and 12. Although the maternal MMPI scales which predict individual scale variances are different in the clinic as compared to the control group, there appears to be little difference in the degree of maternal MMPI - PIC relationship between groups. Maternal MMPI scales are significant predictors of scale variance for 12 of the 16 PIC scales in the clinic group, and for 11 of the 16 scales in the control group. In both groups, ADJ and HPR are free of maternal influence. Four other PIC scales (L, ACH, DVL, D) are predicted by maternal personality in one of the groups but not the other. For most of the other PIC

TABLE 11

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Clinic Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
L	AMMPI[a]	.309						
	PMMPI-L[b]	.419	.110	.411	.189	4.75	1,25	.05
F	AMMPI	.432						
	PMMPI-Ma	.529	.096	.708	.314	5.10	1,25	.05
DEF	AMMPI	.630						
	PMMPI-Hs	.747	.117	.438	.128	11.72	1,25	.01
ADJ	AMMPI	.694						
	none							
ACH	AMMPI	.212						
	PMMPI-D	.338	.126	.381	.175	4.75	1,25	.05
IS	AMMPI	.504						
	PMMPI-Mf	.610	.106	.602	.230	6.84	1,25	.05
	PMMPI-L	.680	.070	-.582	.254	5.27	1.24	.05
DVL	AMMPI	.272						
	PMMPI-Mf	.417	.145	.475	.190	6.23	1,25	.05
	PMMPI-L	.550	.133	-.543	.203	7.15	1,24	.05
	PMMPI-Ma	.676	.126	-.542	.181	9.01	1,23	.01

TABLE 11 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Clinic Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
SOM	AMMPI	.411						
	PMMPI-Ma	.609	.198	.987	.278	12.61	1,25	.01
D	AMMPI	.457						
	none	-	-	-	-	-	-	-
FAM	AMMPI	.454						
	PMMPI-F	.626	.172	.634	.195	11.61	1,25	.01
	PMMPI-Ma	.713	.087	.447	.164	7.42	1,24	.05
DLQ	AMMPI	.453						
	none	-	-	-	-	-	-	-
WDL	AMMPI	.488						
	PMMPI-L	.583	.095	.485	.204	5.66	1,25	.05
	PMMPI-MAS	.657	.077	.388	.167	5.40	1,24	.05
ANX	AMMPI	.413						
	PMMPI-Mf	.511	.098	-.449	.200	5.06	1,25	.05
PSY	AMMPI	.294						
	PMMPI-MAS	.396	.102	.538	.260	4.26	1,25	.05
HPR	AMMPI	.502						
	none	-	-	-	-	-	-	-

TABLE 11 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Clinic Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
SSK	AMMPI	.315						
	PMMPI-K	.441	.126	-.776	.327	5.63	1,25	.05
Exter-naliza-tion	AMMPI	.522						
	PMMPI-F	.598	.076	.435	.199	4.75	1,25	.05
Inter-naliza-tion	AMMPI	.407						
	PMMPI-MAS	.497	.090	.289	.136	4.51	1,25	.05
Cog Dev	AMMPI	.353						
	PMMPI-Mf	.464	.111	.433	.189	5.22	1,25	.05
	PMMPI-L	.605	.141	-.581	.198	8.63	1,24	.01
	PMMPI-Ma	.697	.092	-.482	.181	7.06	1,23	.05
	PMMPI-Pa	.756	.059	.343	.146	5.47	1,22	.05
	PMMPI-Pd	.813	.057	-.344	.134	6.55	1,21	.05

Note. Clinic group: n = 40.

[a]AMMPI refers to all adolescent MMPI scales, added as a single step to the step-wise analyses.

[b]PMMPI refers to maternal MMPI.

TABLE 12

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Control Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
L	AMMPI[a]	.513						
	none	-	-	-	-	-	-	-
F	AMMPI	.538						
	PMMPI-Sc[b]	.678	.140	.593	.180	10.86	1,25	.01
DEF	AMMPI	.175						
	PMMPI-MAS	.350	.175	-.354	.136	6.81	1,25	.05
	PMMPI-Hy	.474	.124	.462	.194	5.71	1,24	.05
	PMMPI-Mf	.563	.089	-.373	.172	4.71	1,23	.05
ADJ	AMMPI	.416						
	none	-	-	-	-	-	-	-
ACH	AMMPI	.431						
	none	-	-	-	-	-	-	-
IS	AMMPI	.495						
	PMMPI-K	.573	.078	.451	.211	4.60	1,25	.05
	PMMPI-F	.651	.078	.728	.313	5.40	1,24	.05
DVL	AMMPI	.435						
	none							

TABLE 12 - Continued

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Control Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
SOM	AMMPI	.446						
	PMMPI-Pd	.577	.131	.532	.191	7.77	1,25	.01
D	AMMPI	.528						
	PMMPI-Hs	.658	.130	.628	.204	9.50	1,25	.01
FAM	AMMPI	.502						
	PMMPI-F	.592	.090	.692	.294	5.55	1,25	.05
DLQ	AMMPI	.434						
	PMMPI-Pa	.594	.160	.545	.174	9.76	1,25	.01
WDL	AMMPI	.473						
	PMMPI-D	.651	.178	.613	.171	12.88	1,25	.01
ANX	AMMPI	.365						
	PMMPI-Hs	.460	.095	.470	.224	4.40	1,25	.05
	PMMPI-Mf	.609	.149	-.595	.197	9.13	1,25	.01
PSY	AMMPI	.452						
	PMMPI-Mf	.547	.095	-.433	.188	5.29	1,25	.05

TABLE 12 - Continued

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Control Group

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
HPR	AMMPI	.227						
	none	-	-	-	-	-	-	-
SSK	AMMPI	.452						
	PMMPI-Pa	.561	.109	.369	.148	6.24	1,25	.05
	PMMPI-Mf	.642	.081	-.359	.154	5.45	1,24	.05
Externalization	AMMPI	.384						
	PMMPI-Pa	.486	.102	.304	.136	4.96	1,25	.05
Internalization	AMMPI	.537						
	PMMPI-Pa	.698	.161	.436	.119	13.40	1,25	.001
	PMMPI-Mf	.770	.072	-.329	.120	7.56	1,24	.05
	PMMPI-L	.811	.041	-.426	.189	5.09	1,23	.05
Cog Dev	AMMPI	.447						
	none	-	-	-	-	-	-	-

Note. Control group: n = 40.

[a]AMMPI refers to all adolescent MMPI scales, added as a single step to the step-wise analyses.

[b]PMMPI refers to maternal MMPI.

scales, there are differences in the maternal MMPI scales which contribute to scale variance, but these differences do not add up to a consistent pattern. Correlations between the maternal MMPI and PIC as a function of group membership are presented in Table 13. The pattern of correlations also suggests that the degree of relationship between maternal personality and the PIC is roughly the same on both groups. These results do not suggest that the mother's personality affects her ratings of a clinic-referred child more than it affects her ratings of a non-clinic child.

Male vs. Female Differences in the Relationship between PIC and Maternal MMPI Scales

In order to examine the possibility that mothers' self-descriptions would predict their descriptions of daughters more closely than they would predict their descriptions of sons, correlations between maternal MMPI's and PIC's as a function of sex were tested for significance (Table 14). In contrast to the results of Lachar and Sharp (1979), there were fewer correlations between maternal MMPI scales and PIC's generated about daughters than between maternal MMPI scales and PIC's generated about sons. In fact, there appear to be more correlations

TABLE 13

Significant Correlations between Mothers' MMPI and PIC Scales for the Clinic and Control Groups

PIC scale		Mothers' MMPI Scale L	F	K	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si	MAS
L	Cl	.40*													
	Ct			.40*											
F	Cl												.35		
	Ct		.54*		.35	.34		.45*				.34	.28		
DEF	Cl														
	Ct			.39*											-.41*
ADJ	Cl			.32											
	Ct		.36		.34				-.26		.31				.36*
ACH	Cl	-.27				-.37*									
	Ct														
IS	Cl														
	Ct													-.28	
DVL	Cl					.27			.27						
	Ct														
SOM	Cl		.38*				.40*					.38*	.53*		
	Ct		.46*	-.36	.33	.35		.52*							.28
D	Cl														
	Ct	-.28	.44*	-.43*	.54*			.33							.43
FAM	Cl		.47*				.28	.37*				.44*	.51*		
	Ct		.45*	-.32	.27	.46*	.32	.39*		.27	.46*				.49*

TABLE 13 - Continued

Significant Correlations between Mothers' MMPI and PIC Scales for the Clinic and Control Groups

PIC scale		Mothers' MMPI scale													
		L	F	K	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si	MAS
DLQ	Cl			.31											
	Ct		.34		.49*	.35	.39*	.31		.30	.34			.35	.40*
WDL	Cl	.27													
	Ct		.41*		.39*	.44*		.43*		.38*	.42*	.38*		.37*	.33
ANX	Cl						.31		-.34			.36	.34		
	Ct		.30	-.29	.41*				-.36*						.37*
PSY	Cl								-.34						
	Ct		.40					.32							
HPR	Cl														
	Ct														
SSK	Cl								-.31						
	Ct				.33	.31		.32	-.27					.28	.28
Externalization	Cl														
	Ct		.41*		.36	.34	.36	.36*		.30	.40*	.26			.45*
Internalization	Cl											.29			
	Ct		.48*	-.35	.48*	.38*		.44*	-.27	.32	.32				.42*
Cognitive Development	Cl						.28			-.29					
	Ct														

Note. Clinic (Cl) group: n = 40; Control (Ct) group: n = 40.

*p < .01: all other coefficients significant at p < .05.

TABLE 14

Significant Correlations between Mothers' MMPI and PIC Scales as a Function of Sex of Child

PIC scale	Sex	Mothers' MMPI scale L	F	K	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si	MAS
L	f		-.29	.29											
	m								.36						
F	f	.28	.38*							.29		.35			
	m		.35		.32	.27	.29	.31					.46*		.27
DEF	f						.32								
	m														
ADJ	f	.33													
	m		.36		.28	.32	.32				.39*				.27
ACH	f														
	m					.35		.28							
IS	f														
	m														
DVL	f														
	m														
SOM	f		.37*										.37*		
	m		.52*		.51*	.48*	.51*	.50*		.29	.37*	.44*	.45*		.33
D	f			-.28						.30					.34
	m		.37*		.44*	.46*	.33	.28			.43*	.33	.29		.38*
FAM	f		.44*	-.31		.35	.44*	.27		.36	.31	.28		.38*	.46*
	m		.52*		.36	.34	.29	.49*			.47*	.42*	.64*		.37*

TABLE 14 - Continued

Significant Correlations between Mothers' MMPI and PIC Scales as a Function of Sex of Child

PIC scale	Sex	Mothers' MMPI scale L	F	K	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si	MAS
DLQ	f	.42*			.35		.34								
	m						.28		-.34						
WDL	f	.29	.34	-.27						.33		.32		.32	.35
	m				.29	.39*		.41			.37*				.32
ANX	f								-.35						.31
	m				.45*	.47*	.38*	.32	-.36*		.51	.43*	.34	.26	.30
PSY	f														
	m				.29	.45*		.38*	-.42*		.47*		.29		.40*
HPR	f														
	m														
SSK	f												-.27	.37*	
	m					.39*		.32	.44*		.31				
External-ization	f														
	m		.34								.29		.35		
Internal-ization	f														.33
	m		.36		.45*	.56*	.37*	.48*	-.37*		.52*	.39*	.36	.31	.42*
Cognitive Development	f														
	m														

Note. Females: n = 40; Males: n = 40.

*p < .01; all other coefficients significant at p < .05.

for sons than for daughters. Multiple regression analyses, again following the procedures described above, were conducted separately for the male and female groups. These results are presented in Tables 15 and 16. The IS, DVL, and HPR scales are not predicted by maternal MMPI scales in either group. In both groups, maternal personality accounts for a larger proportion of SOM and FAM variance that does adolescent personality. On the other PIC scales there are differences both in the specific maternal MMPI scales that predict PIC variance and in the extent of the relationship between those scales and the PIC scores. Overall, however, these differences do not form a clear-cut pattern of difference, and the degree of the PIC - maternal MMPI relationship appears to be roughly the same for males and females. These results do not support the hypothesis that mothers' self-descriptions predict their descriptions of daughters more strongly than they predict their descriptions of sons.

The Semantic Differential Scale was given to mothers in order to test whether or not mothers might identify more strongly with daughters than with sons. It was felt that this identification might be a mediating factor in the mother's projection onto her adolescent child. However, mothers did not identify more strongly with

TABLE 15

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Males

PIC Scale	Variable	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
L	AMMPI[a]	.443						
	PMMPI-Mf[b]	.532	.089	.381	.175	4.75	1,25	.05
F	AMMPI	.253						
	PMMPI-Ma	.468	.215	1.79	.563	10.12	1,25	.01
	PMMPI-L	.634	.166	1.38	.420	10.94	1,24	.01
	PMMPI-D	.693	.059	.575	.274	4.41	1,23	.05
DEF	AMMPI	.406						
	none	-	-	-	-	-	-	-
ADJ	AMMPI	.531						
	PMMPI-F	.659	.128	1.08	.351	9.41	1,25	.01
ACH	AMMPI	.385						
	PMMPI-Mf	.496	.111	-.450	.192	5.51	1,25	.05
IS	AMMPI	.556						
	none	-	-	-	-	-	-	-
DVL	AMMPI	.536						
	none							
SOM	AMMPI	.183						
	PMMPI-Hy	.482	.299	.885	.232	14.51	1,25	.001

TABLE 15 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Males

PIC Scale	Variable	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
D	AMMPI	.443						
	PMMPI-Hs	.658	.215	.613	.155	15.67	1,25	.001
FAM	AMMPI	.348						
	PMMPI-Ma	.625	.277	1.23	.262	18.51	1,25	.001
DLQ	AMMPI	.454						
	PMMPI-Ma	.556	.102	1.25	.524	5.74	1,25	.05
	PMMPI-L	.639	.083	.995	.425	5.49	1,24	.05
	PMMPI-Mf	.712	.073	-.784	.326	5.80	1,23	.05
WDL	AMMPI	.503						
	PMMPI-D	.624	.121	.523	.184	8.05	1,25	.01
ANX	AMMPI	.314						
	PMMPI-Hs	.553	.239	.552	.151	13.41	1,25	.001
PSY	AMMPI	.472						
	PMMPI-MAS	.628	.156	.559	.173	10.47	1,25	.01
	PMMPI-Mf	.691	.063	-.491	.222	4.89	1,24	.05
HPR	AMMPI	.345						
	none	-	-	-	-	-	-	-

TABLE 15 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Males

PIC Scale	Variable	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
SSK	AMMPI	.445						
	PMMPI-Mf	.576	.131	-.661	.239	7.64	1,25	.05
Exter-nali-zation	AMMPI	.409						
	PMMPI-Ma	.577	.178	.944	.290	10.59	1,25	.01
	PMMPI-L	.675	.098	.619	.228	7.36	1,24	.05
	PMMPI-Mf	.737	.052	-.377	.179	4.43	1,23	.05
Inter-nali-zation	AMMPI	.429						
	PMMPI-D	.639	.213	.535	.139	.139	14.76	.001
Cog Dev	AMMPI	.522						
	none	-	-	-	-	-	-	-

Note. Males: n = 40.

[a]AMMPI refers to all adolescent MMPI scales, added as a single step to the step-wise analyses.

[b]PMMPI refers to maternal MMPI.

TABLE 16

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Females

PIC Scale	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
L	AMMPI[a]	.269						
	none	-	-	-	-	-	-	-
F	AMMPI	.472						
	PMMPI-Pa[b]	.566	.094	.709	.302	5.94	1.25	.05
DEF	AMMPI	.335						
	none	-	-	-	-	-	-	-
ADJ	AMMPI	.555						
	PMMPI-Si	.623	.068	.608	.286	4.51	1,25	.05
ACH	AMMPI	.333						
	PMMPI-Mf	.430	.097	.605	.292	4.28	1,25	.05
IS	AMMPI	.423						
	none	-	-	-	-	-	-	-
DVL	AMMPI	.425						
	none	-	-	-	-	-	-	-
SOM	AMMPI	.432						
	PMMPI-L	.519	.087	.692	.324	4.55	1,25	.05
	PMMPI-MAS	.616	.097	.531	.216	6.07	1,24	.05
	PMMPI-Ma	.691	.075	.589	.250	5.57	1,23	.05

TABLE 16 - Continued

Multiple Regression of Adolescent and Maternal MMPI Scales on PIC Scales - Females

PIC Scales	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
D	AMMPI	.385						
	PMMPI-K	.527	.142	-.764	.279	7.50	1,25	.05
FAM	AMMPI	.293						
	PMMPI-Si	.555	.258	.733	.193	14.38	1,25	.001
	PMMPI-F	.637	.082	.627	.270	5.39	1,24	.05
DLQ	AMMPI	.562						
	PMMPI-Hs	.632	.070	.918	.422	4.72	1,25	.05
WDL	AMMPI	.346						
	PMMPI-MAS	.441	.095	.424	.206	4.27	1,25	.05
	PMMPI-Mf	.543	.102	.582	.252	5.35	1,25	.05
	PMMPI-Pd	.616	.073	-.425	.203	4.37	1,23	.05
ANX	AMMPI	.452						
	PMMPI-MAS	.549	.097	.419	.181	5.34	1,25	.05
PSY	AMMPI	.383						
	PMMPI-Pd	.476	.093	-.557	.264	4.43	1,25	.05
HPR	AMMPI	.491						
	none	-	-	-	-	-	-	-

TABLE 16 - Continued

Multiple Regression of Adolescent and Maternal MMPI

Scales on PIC Scales - Females

PIC Scales	Variables	R^2	R^2 Change	B	Standard Error of B	F	df	Significance of B
SSK	AMMPI	.384						
	PMMPI-Si	.523	.139	.647	.240	7.27	1,25	.05
	PMMPI-Pd	.599	.076	-.500	.235	4.54	1,24	.05
Externalization	AMMPI	.593						
	PMMPI-D	.711	.118	.396	.123	10.41	1,25	.01
Internalization	AMMPI	.379						
	PMMPI-Si	.490	.111	.397	.170	5.45	1,25	.05
Cog Dev	AMMPI	.380						
	none	-	-	-	-	-	-	-

Note. Females: n = 40.

[a]AMMPI refers to all adolescent MMPI scales, added as a single step to the step-wise analyses.

[b]PMMPI refers to maternal MMPI.

either sex. There were no significant differences between daughters and sons on either the Identification Score, $t(72) = .97$, N.S., or the Evaluation Score, $t(72) = .19$, N.S. The only significant differences on the Semantic Differential Scale were between the clinic and control groups. Clinic group mothers identified significantly less with their children, $t(72) = 8.87$, $p < .001$, than did control group mothers. The clinic mothers also gave their children less favorable Evaluation Scores, $t(72) = -6.71$, $p < .001$. These results are consistent with the presence of PIC differences between the clinic and control groups.

DISCUSSION

As expected, the clinic-referred adolescents obtained higher scores on the Personality Inventory for Children clinical scales than did the non-clinic adolescents. The PIC demonstrated much larger differences between the two groups than did the MMPI's generated by either the adolescents or their parents. The fact that PIC's are significantly different between groups is consistent both with expectation and with the previously reported literature. An adolescent generally comes to a psychological clinic for evaluation because a parent, teacher, or other adult has determined that the teenager varies from "normal" and needs help. The same beliefs which lead to the referral and evaluation are reflected in the responses to the PIC items. Mothers who seek psychological help for their children will describe these children as in need of help.

Adolescent MMPI scores, in contrast to the PIC scores, were generally not significantly different

between groups. Two of the clinical scales (D and Pd) were significantly different between groups, and three additional scales (Sc, Ma, and Si) demonstrated a trend in that direction. However, the fact that more of the adolescent MMPI scales did not differ between the two groups was an unexpected result, and is worthy of examination. In one sense, this result is consistent with several previously cited studies (Griest, Forehand, Wells, & McMahon, 1980; Lobitz & Johnson, 1975; Sheperd, Oppenheim, & Mitchell, 1971) in which there were few, if any, actual differences between clinic and non-clinic children and adolescents. It is possible that there was little real difference between the clinic and control groups in this study as well, and that this lack of substantial difference is accurately reflected in the lack of significant differences between the groups on most of the MMPI scales.

One possible reason for a lack of substantial differences between groups may be related to the methods used to recruit the control group for this study. The control group consisted of mothers and adolescents seeking medical, rather than psychiatric, evaluation. While every attempt was made to ensure that all medical clinic patients were given an equal chance to participate in the study, it is possible that a subtle selection bias may have taken place.

That is, adolescents and/or mothers who may have hoped that participation would lead to insight into a problem or serve as an entrance into therapy may have been more motivated to participate in the project. The comments of some of the individuals, after feedback was given to them, suggests that this factor operated in several cases. The subjects in the current study were paid a small sum which was designed to motivate disinterested subjects. However, it is possible that this sum did not affect the presence of a subtle selection bias.

The dynamic discussed above is a potential hazard to validity whenever subjects for a control group are solicited. However, another factor which may have contributed to a lack of differences between the MMPI's produced by the two groups of adolescents may have been the specific nature of the control group used in this study. Researchers in primary health care have suggested that more than half of the visits to a primary care physician can be related to emotional difficulties. Although subjects seeing their physicians primarily for psychological complaints were excluded from the sample, it is possible that the minor complaints or requests for routine physicals which prompted the medical visits were associated with psychological difficulties.

Of course, it is also possible that there were substantial psychological differences between the clinic

and the control group adolescents, but that these differences are not reflected in the adolescents' MMPI scores. The adolescents appearing at both of the psychological clinics came for an evaluation primarily at the request of someone else. Although many times adolescents concur with the need for the evaluation, frequently they do not. They may not see or admit to the presence of psychological problems, and they may be motivated to deny problems on the MMPI.

It is difficult, on the basis of these results alone, to know the reason for the lack of greater differences between the adolescent MMPI's of the clinic and control groups. Are the clinic adolescents "normal," or are the control adolescents "pathological?" The average MMPI profile obtained by clinic adolescents is well within normal limits, but is very similar to an average adolescent profile obtained from a sample of 834 teenagers in psychiatric treatment (Marks, Seeman, & Haller, 1974). Unfortunately, as will be seen later, the reasons for the lack of differences have implications for an understanding of the role of the mother's personality on the PIC.

Like the adolescent MMPI scores, mother MMPI scores also show few significant differences between the clinical and control groups. The current results suggest that mothers of clinic adolescents are likely to be more anxious

and to display a higher incidence of "neurotic" traits. In addition they tend to be more depressed and socially isolated. Is it possible that these mothers are projecting these or related traits onto the adolescents that they bring in for evaluation ?

In order to begin searching for possible maternal bias on PIC results, it is useful to consider each PIC scale and summary score individually.

The Lie Scale (L)

When the clinic and control groups are combined for analysis, the maternal Mf scale contributes a significant amount of variance to the PIC L score, over and above the variance contributed by the adolescent MMPI scales. It appears that the personality features measured by the MMPI Mf scale are also related to PIC L variance. The Mf scale is intended to measure resemblence to sex-role stereotype and degree of dependency/assertiveness. Perhaps women who are less "passive" and "feminine" are more likely to obtain high PIC L scores.

The fact that the L scale is significantly predicted by a maternal MMPI scale is not surprising or disturbing from a test-validity point of view. The L scale is a validity scale, and is designed to evaluate the informant's response set, which is understandably related to the

informant's personality. Although the L scale is related to the maternal Mf scale, the strength of the relationship does not allow for consistent interpretations of the mother's personality based on the L scale score.

The F Scale (F)

Like the L scale, the F scale also reflects maternal as well as adolescent personality. Mother MMPI scales F, Ma, L, Hs, and Mf, when entered into the multiple regression equation after adolescent MMPI scales, each contribute significantly to PIC F variance. Of all the mother MMPI scales the PIC F score is most highly correlated with, and most closely predicted by, the maternal MMPI F scale. This suggests that the mother's response set is somewhat consistent across both tests. The PIC F scale is also correlated with and predicted by the MMPI Ma scale, which raises the hypothesis that maternal agitation may be related to response style. However, it is important to remember that the correlations, though highly significant, are of only moderate size. There is only a relatively small percentage of shared variance between PIC F and mother-MMPI F, which leaves room for many other sources of variance.

Because the F scale, like the L scale, is a validity scale, the fact that maternal personality factors contribute significantly to the F scale variance is not a reason for

psychometric concern. As a validity scale, the F scale was designed to detect exactly the sort of "bias" found here. These results suggest that response style as measured by the PIC F scale is related to MMPI response style and to other maternal personality factors.

The Defensiveness Scale (DEF)

As is the case for the other validity scales, the DEF scale reflects a combination of adolescent and maternal personality. The maternal MMPI-Hy scale accounts for a significant proportion of DEF variance, which suggests that hysterical personality features such as excessive use of denial and repression may be related to defensiveness on the PIC. But the overall multiple regression coefficient is among the lowest for PIC scales, and so it does not appear that a high DEF scale has any strong relationship to specific maternal personality characteristics.

The Adjustment Scale (ADJ)

Two maternal MMPI scales (L and Hy) are significant predictors of ADJ scale variance, when these scales are added to the regression equation after all adolescent MMPI scales have been added. Since both L and Hy are related to defensiveness and denial, it may be that mothers who minimize their own difficulties tend to blame their problems on their children. High L and Hy scores are also

generally associated with psychological naivete, and this result may suggest that psychologically naive mothers have, or think they have, more disturbed children.

The Achievement Scale (ACH)

Maternal MMPI scales do not account for a significant proportion of ACH variance when they are added to the multiple regression equation after the adolescent MMPI scales. ACH is significantly correlated with only one maternal MMPI scale, and with seven adolescent MMPI scales. ACH appears to be relatively free of influence by maternal personality factors.

The Intellectual Screening Scale (IS)

The maternal MMPI-D scale accounts for a significant proportion of IS scale variance over and above that which is accounted for by the adolescent MMPI. Mothers who experience depressive symptoms may be more likely to endorse symptoms of intellectual limitation in their children, but again, the proportion of shared variance between IS and MMPI-D is too small to add interpretive significance to the IS scale.

The Development Scale (DVL)

There are no maternal personality scales which contribute significantly to DVL scale variance, and therefore DVL

appears to relatively free of influence by specific maternal personality traits.

The Somatic Concern Scale (SOM)

Maternal personality factors are significant predictors of SOM variance, and, in fact, maternal MMPI scores account for more variance than do adolescent MMPI scores. Therefore the SOM scale may reflect maternal personality more than adolescent personality. The three mother MMPI scales contributing significantly to SOM variance are F, Hy, and Ma. The interpretive significance of these results is not clear; perhaps the SOM scale reflects current maternal distress and agitation. SOM is not correlated with the adolescent MMPI Hs scale, which also measures somatic concern, and it is only correlated with two other adolescent MMPI scales. In contrast, SOM is significantly correlated with 10 of the maternal MMPI scales. Similar correlations are presented by Lachar and Sharp (1979), and, in fact, these authors acknowledge the possibility that disturbed mothers are more likely to interpret their children's behavior as having a physical base. The results of the present study give further support to that possibility.

The Depression Scale (D)

The D scale score also reflects both adolescent and maternal personality. D is significantly correlated with

seven of the adolescent MMPI scales. Surprisingly, the largest correlate and predictor of the D scale is the adolescents' score on the Pd scale of the MMPI. This relationship was not reported by Pipp (1979); in her study PIC D was most highly correlated with MMPI-D and not correlated with MMPI-Pd. Lachar and Sharp (1979) report that PIC D is significantly correlated with maternal measures of depression and anxiety; this is also the case in the current study. In the multiple regression analysis, maternal anxiety (MAS) accounted for a significant proportion of D variance. Therefore the D scale appears to reflect maternal anxiety as well as adolescent disturbance.

The Family Relations Scale (FAM)

The FAM scale is significantly correlated with 12 out of the 14 mother MMPI scales and with only two of the adolescent MMPI scales. It is not surprising therefore that one of the maternal MMPI scales (F) contributes significantly to the variance of the FAM scale, over and above the variance assigned to the adolescent MMPI. Both the F scale and the FAM scale may be measuring general maternal distress. Lachar and Sharp (1979) also report a high number of correlations between FAM and the maternal MMPI. As they indicate, high correlations should be expected, since the FAM scale purports to measure parental and

family difficulties. High correlations merely indicate that the FAM scale is fulfilling its assigned role.

The Delinquency Scale (DLQ)

The DLQ scale has fewer correlations with the mother MMPI scales than many of the other PIC scales. As might be expected, the largest correlate of DLQ is the Pd scale of the adolescent MMPI. Nevertheless, two maternal MMPI scales (Hs and L) are significant predictors of DLQ variance when these scales are added to the regression equation after the adolescent MMPI scales. DLQ variance, therefore, can be attributed to both adolescent and maternal personality factors. However, the nature of the relationship between DLQ and specific maternal personality characteristics is not clear from these results. It is possible that a mother's hypochondriacal tendencies and psychological naivete contribute to her perception of her child as difficult to control.

The Withdrawal Scale (WDL)

Lachar and Sharp (1979) report no significant correlations between the WDL and mother MMPI scales. In contrast to their results, the WDL scale in the current sample is correlated significantly with nine of the mothers' MMPI scales. The maternal MAS scale is a significant predictor of WDL variance, over and above the variance accounted for

by the adolescent MMPI. This suggests that a mother's own anxiety level will be one factor affecting her tendency to describe her child as fearful and withdrawn.

The Anxiety Scale (ANX)

The ANX scale is significantly correlated with maternal MMPI scales Mf, Hs, Hy, MAS, Pt, Sc, D, and F. The pattern of correlations suggests that anxiety and distress in the mother are correlated with her descriptions of anxiety in the adolescent. In the step-wise multiple regression analysis, maternal MMPI scales Hs and Mf contribute significantly to ANX variance even after the adolescent MMPI claims its share of variance. Again, it is difficult to guess which personality factors measured by the Hs and Mf scales are specifically related to ANX variance. It may be that psychosomatic concerns (Hs) and passivity/dependence (low Mf) in the mother contribute to the likelihood that she will see her child as anxious.

The Psychosis Scale (PSY)

The PSY scale, like many of the other scales, is significantly related to both adolescent and maternal personality. The largest predictors of PSY variance are the adolescent MMPI scales. But even after the variance attributable to adolescent personality variables is removed, maternal MMPI scales Mf and MAS account for a

significant portion of the PSY variance. Again, it may be that passivity or dependence (low Mf) and anxiety (MAS) are the factors which contribute to the likelihood that a mother will endorse items in the PSY scale.

The Hyperactivity Scale (HPR)

The HPR scale is not correlated significantly with any of the mother MMPI scales. Not surprisingly, its highest correlate is with the Pd scale of the adolescent MMPI. Maternal personality factors do not account for a significant portion of HPR variance.

The Social Skills Scale (SSK)

The SSK scale is significantly correlated with adolescent MMPI scales L, D, Hy, Pd, Pa, Pt, Sc, and Ma. Interestingly, it is not correlated with Si, the Social Isolation scale. This is somewhat different from the results reported by Pipp (1979). She reports significant correlations between SSK and Si, and several other adolescent MMPI scales. In the current sample SSK is also correlated with maternal MMPI scales, most notably with Si, D, Pt, and Mf. In addition MMPI scales Mf and D are significant predictors of SSK variance when added to the multiple regression equation after adolescent MMPI scales. This pattern suggests that passive, depressed mothers tend to report the presence of social skill deficiencies in

their children.

Summary Scores

Since the maternal MMPI scales contribute significantly to two of the three PIC scales that make up the Externalization score, it is expected that the maternal MMPI will contribute to the Externalization score as well. This is, in fact, the case. The maternal MMPI F scale is the only maternal scale which contributes to Externalization score variance. If F is related to general maternal distress, it may be that maternal distress contributes to a mother's tendency to perceive or report externalizing behaviors.

The Internalization score is made up of six PIC scales, all of which are significantly correlated with mother MMPI scales. The Internalization summary score is also correlated with maternal MMPI scales, and two mother MMPI scales (MAS and Mf) account for a significant proportion of the score variance which remains after variance is assigned to the adolescent MMPI. A mother's tendency to describe internalizing behaviors in her child is apparently related to the presence of her own anxiety. The relationship between the MMPI-Mf scale and the Internalization score is less clear. The Mf scale is inversely correlated with three of the six scales that make up the Internalization summary score. In two of these scales, and in the

summary score, it accounts for a significant proportion of score variance after the adolescent MMPI claims its share of variance.

Finally, the maternal MMPI does not appear to be related to the Cognitive Development summary score, and does not contribute anything significant to its variance in the overall group. The Cognitive Development score appears to be free of influence by maternal personality.

In all of the PIC validity scales, and in 10 out of the 13 clinical scales, maternal personality characteristics, as measured by the MMPI, are significant predictors of PIC scales. In the entire sample, mothers' descriptions of their children are best predicted by a combination of the children's self-descriptions and the mothers' self-descriptions.

What are the implications of the fact that maternal MMPI's are so strongly related to PIC scale scores in this sample? It is important to remember the caveat of correlational studies: Correlation says nothing about causation. The relationship between maternal MMPI scales and PIC scale scores does not necessarily imply that PIC scales are not valid, or that the maternal "influence" represents a source of invalidity. Several alternative explanations can be offered to account for the relationship between the

mother's self-description and her description of her child.

First, it is possible that the mother is describing her child accurately, but that the adolescent is not describing himself or herself accurately. That is, the PIC is valid, but the adolescent MMPI is not. If general disturbance in the mother is correlated with general disturbance in the child, and if the disturbed child presents herself as not disturbed, there will be high correlations between the mother's MMPI and the PIC, and the mother's MMPI will appear to affect PIC scores.

In order for this situation to be possible, disturbance in the mother must be correlated with the presence of disturbance in the child. The previously cited literature which demonstrates MMPI differences between the parents of disturbed and non-disturbed children supports this condition. In the current study, mothers of clinic children endorse more symptoms of disturbance than do mothers of non-clinic children, but this difference between groups is not as strong as it has been in previous studies. A second condition is that the disturbed adolescents tend to deny or minimize the extent of their own psychopathology. The fact that there are few significant differences between the MMPI's of clinic and control adolescents suggests that this may have been the case in this study. In order to

rule out the above explanation for the strong mother MMPI - PIC relationship, a more accurate criterion measure is needed. The unanswerable question of whether or not the adolescent MMPI accurately reflects adolescent pathology in the current sample is one of the major barriers to the interpretation of these results.

A second possible explanation for the close relationship between mothers' self-descriptions and the descriptions of their children is that both PIC's and adolescent MMPI's are accurate, but both are measuring different things. As in the first instance, the resulting low correlations between the PIC and the adolescent MMPI would leave room for the maternal MMPI to explain considerable PIC variance. An example of this situation might be the IS scale. It is possible that mothers of children with the kinds of intellectual limitations measured by IS tend to have more symptoms of depression than do mothers of normal children. Therefore mother MMPI - IS correlations would be significant. But adolescent MMPI - IS correlations would not necessarily be significant, because the MMPI does not directly measure intellectual deficits. If the depressed mother accurately describes her child on the IS scale, her MMPI would be a significant predictor of IS variance, but no maternal "bias" would be present.

Finally, a third possible explanation for the relationship between maternal MMPI scales and PIC scales is that the mother is projecting her own or related personality characteristics onto her description of her child. If this is the case, mothers with specific personality traits describe their chilren as having these or related traits, and they are, at least partially, wrong. In this case, the close relationship between the mothers' MMPI and the PIC would suggest that the PIC is an invalid measure of child psychopathology, because it is measuring maternal as well as child personality. An example of this might be the SOM scale. More of the SOM variance is related to the mother's MMPI than to the adolescent MMPI. There is no significant relationship between the SOM scale and the Hypochondriasis scale of the adolescent MMPI. In the current sample, disturbed mothers tend to describe their children as having psychosomatic problems, which is probably a result of maternal projection. This "bias" or projection might be operating on other scales as well.

Because of the primarily correlational nature of this study, it is impossible to assign a cause to the relationship between mothers' self-descriptions and their descriptions of their children. It is not possible to determine which of the above reasons are operating to create the relationships discussed for each PIC scale. Furthermore,

it is likely that all of the above reasons are operating together in different proportions, for each of the PIC scales where maternal factors play a role. As the analyses of individual scales suggest, the specific effect of maternal personality on the PIC is not clear. It cannot be said, for example, that a given type of mother projects a specific type of trait onto her adolescent, or that a high score on a specific PIC scale implies the presence of a specific trait in the mother. Some possible causative relationships between specific maternal traits and specific PIC scales are hinted at in the results of the current study, but continuing investigation with the PIC is needed before consistent relationships can be specified.

Clinic vs. Control Group Differences in PIC - Maternal MMPI Relationships

Because previous research has demonstrated greater relationships between maternal personality and mothers' ratings of children in clinical groups than in control groups, the same pattern was expected in the current study. However, no such pattern was demonstrated. The most consistent differences between clinic-referred and non-clinic adolescents are the mothers' descriptions of their children. Clinic and control mothers clearly describe their children differently, but the descriptions in both groups are

related to maternal personality. For four of the PIC scales, the maternal MMPI affects scale variance in one group but not in the other. For most of the other PIC scales, there are differences in the maternal MMPI scales which contribute to scale variance. It would be premature to give too much interpretive significance to these differences, especially since they do not add up to any clear cut pattern of difference between the two groups. If the maternal MMPI - PIC relationships are due to projection, it appears that there is little difference between clinic and control mothers in their tendency to project personality characteristics onto their adolescent children.

Male vs. Female Differences in PIC - Maternal MMPI Relationships

It was hypothesized that the relationship between maternal MMPI's and the PIC would be stronger for daughters than for sons. This was predicted because the Lachar and Sharp (1979) data contained almost twice as many significant mother MMPI - PIC correlations for females as for males. If perceived similarity mediates the incidence of projection, it was argued, it is conceivable that mothers would identify more with their daughters than with their sons, and thus project more of their own traits onto their daughters. This hypothesis, however, was not supported

by the current study. Maternal MMPI - PIC relationships were not stronger for daughters than for sons. Multiple regression analyses suggest that maternal personality affects PIC scores to the same degree in both the male and female groups, although there are differences in the specific MMPI scales which are related to the PIC scales. However, these differences do not add up to any clear pattern of difference between the two groups. In both the male and female groups, maternal personality plays an important role in some of the scales measuring internalizing behaviors and in two of the externalizing behavior scales, but other scales in both of these groups are independent of maternal influence. It was originally predicted that mothers might identify more strongly with daughters, but the lack of Identification score (Semantic Differential) differences suggest that mothers identify equally with sons and daughters.

The results of this study suggest that the most important differences between the clinic-referred and the non-clinic adolescents are the mothers' descriptions of their children. There were some differences between the self-descriptions of mothers and adolescents between these two groups, but these differences were not as dramatic.

Furthermore, the mother's description of her child appears to be related to her own personality, regardless of whether or not she is referring him for a psychological evaluation.

These results suggest that most PIC scales are measuring more than just the child's personality and behavior. The most striking pattern in the study results is the recurring relationship between maternal MMPI scales associated with anxiety and neurosis (Hs, Hy, MAS, and perhaps low Mf) and PIC scales measuring internalizing behaviors. These results suggest that the SOM, ANX, PSY, WDL, and SSK scales may be reflecting maternal anxiety as well as childhood psychopathology.

As discussed above, the close PIC - maternal MMPI relationships do not necessarily imply that the mother contributes invalidity to the PIC. Nevertheless, such a possibility cannot be ruled out. The results of this study suggest that the PIC should be used with caution. The PIC should not be used as a means to form diagnostically homogeneous research groups, because of the risk that maternal, along with adolescent, personality is being measured. Also, the PIC profile, and especially the scores on the internalizing scales, should be used clinically only in conjuction with other clinical information. The degree of maternal psychopathology should be considered when evaluating PIC results.

Continued research is needed in order to shed further light on the specific relationships between maternal personality and PIC results. Because correlations are notoriously variable across populations and studies, additional correlational studies are needed to give support to the current results. Further information could be obtained by comparing PIC results generated by specific types of mothers (e.g. depressed, anxious, and characterological mothers). Independent measures of adolescent psychopathology would also be helpful in this research, and would provide a more reliable standard against which to compare the PIC results. Finally, comparisons before and after either the adolescent's or mother's therapy would help to understand the source of the PIC - maternal MMPI relationship.

SUMMARY

The Personality Inventory for Children (PIC) is an actuarially constructed measure of childhood psychopathology which is usually completed by the mother. Scores for three validity and 13 clinical scales combine to form the PIC profile. The validity scales measure general defensiveness and exaggeration, but cannot measure the selective effects of specific maternal personality traits. This study investigated the effect of the mother's personality on the PIC.

Eighty mother - adolescent pairs were the subjects in the study. The clinic group consisted of 40 adolescents who had been referred for psychological evaluation, along with their mothers, and the control group consisted of 40 adolescents who were general medical outpatients, along with their mothers. The mothers completed the MMPI, PIC, and a Semantic Differential Scale. Adolescents completed the MMPI. As predicted, PIC scores were

significantly different between the two groups on most of the clinical scales. Clinic adolescents differed from control adolescents on only two MMPI scales, and clinic mothers differed from control mothers on three MMPI scales.

Multiple regression analyses were used to see if the mother's personality (i.e., the MMPI) accounted for any PIC variance over and above the amount of variance accounted for by the adolescent's personality. In 13 of the 16 PIC scales, one or more maternal MMPI scales accounted for a significant proportion of scale variance, which suggests that these PIC scales are related to maternal, as well as adolescent, personality. PIC's generated by both clinic and control mothers were equally related to maternal personality. Also, PIC's generated by mothers of sons and mothers of daughters did not differ in the degree of their relationship to maternal personality. There are a number of possible reasons for PIC - maternal MMPI relationships, and these results do not necessarily imply the presence of unwanted "bias" on the PIC. But the results reinforce the wisdom of using PIC test results only in conjunction with other clinical information in a clinical evaluation.

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APPENDIX A

PERSONALITY INVENTORY FOR CHILDREN

ADMINISTRATION BOOKLET

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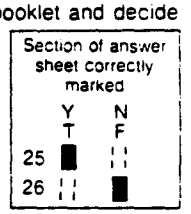
This inventory consists of statements about children and family relationships.

DIRECTIONS: First fill in the information requested on the answer sheet; then read each of the statements in this booklet and decide whether it is *true* or *false as applied to your child.*

Look at the example of the answer sheet shown at the right. In the example the mother decided that statement 25 was true as applied to her child and statement 26 was false as applied to her child.



If a statement is TRUE or MOSTLY TRUE, as applied to your child, use a pencil to blacken between the lines of the column headed YT (Yes or True column. See 25 in the example). If a statement is FALSE or NOT USUALLY TRUE, as applied to your child, blacken between the lines of the column headed NF (No or False column. See 26 in the example).

In marking your answers on the answer sheet, *be sure that the number of the statement agrees with the number on the answer sheet.* Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks on this booklet.

W-152A

DO NOT MAKE ANY MARKS ON THIS BOOKLET

1. My child learned to walk before he (she) was six years old.
2. My child seems average or above average in intelligence.
3. My child is small for his (her) age.
4. Sometimes I think I'm too easy with the child.
5. My child never talks to strangers.
6. My child tends to pity him (her) self.
7. My child often plays with a group of children.
8. My child usually kisses me before going to school or to play.
9. My child hardly ever smiles.
10. Others always listen when my child speaks.
11. My child has hit a school official (teacher etc.).
12. Several times my child had complaints, but the doctor could find nothing wrong.
13. Other children often get mad at my child.
14. Usually my child kisses his (her) parents before going to bed.
15. My child hardly ever needs punishment.
16. My child thinks others are against him or her for racial or religious reasons.
17. My child worries about things that usually only adults worry about.
18. My child was a blue baby.
19. I often wonder if my child is lonely.
20. Usually my child takes things in stride.
21. My child has many friends.
22. My child is troubled by constant coughing.
23. My child is likely to take remarks the wrong way.
24. Little things upset my child.
25. My child keeps thoughts to him (her) self.
26. My child sometimes thinks he or she is someone else.
27. Often my child has to go to bed with a cold.
28. As a younger child, it was impossible to get my child to take a nap.
29. It has been a long time since our family has gone out together.
30. At one time my child was unconscious with an injury to his (her) head.
31. My child's manners sometimes embarrass me.
32. My child has never mentioned his (her) heart racing or pounding.
33. My child seldom gets a restful sleep.
34. My child often tries to show off.
35. My child is always humming to him (her) self.
36. My child has had to have drugs to relax.
37. My child has usually been a quiet child.
38. At times my child has seriously hurt others.
39. My child has never had cramps in the legs.
40. My child has had a severe case of one or more of the following: measles, mumps, encephalitis (sleeping sickness), chicken pox, scarlet fever, whooping cough, meningitis.
41. My child has a good sense of humor.
42. At times my child yells out for no reason.
43. My child sometimes sees things that aren't there.
44. As a child, my child hit other children on the head with sharp toys.
45. My child often complains of being hungry.
46. My child is worried about sin.
47. Stuttering has been a problem for my child.

GO ON TO THE NEXT PAGE

48. My child will beg until I give in.
49. The child's father has been fired from his job several times.
50. Other children don't seem to listen to or notice my child much.
51. My child is fairly helpful in doing chores around the house.
52. My child is rather unattractive.
53. My child is liable to scream if disturbed.
54. My child sometimes undresses outside.
55. My child hardly ever kisses me.
56. My child has little self-confidence.
57. Certain foods make my child ill.
58. My child has no special talents.
59. Our family seems to enjoy each other more than most families.
60. My child usually undresses him (her) self for bed.
61. I often wish my child would be more friendly.
62. My child broods some.
63. My child could do better in school if he (she) tried.
64. My child can comb his (her) own hair.
65. My child never liked to be cuddled.
66. At times my child gets so excited you can't understand his (or her) talk.
67. Often my child destroys other children's toys.
68. The child's father seems jealous of the child.
69. My child is usually rejected by other children.
70. My child seems to enjoy destroying things.
71. At times my child pulls out his (her) hair.
72. My child usually comes when called.
73. Now and then my child writes letters to friends.
74. I am afraid my child might be going insane.
75. My child sweats very little.
76. My child seems to delight in smashing things.
77. My child is over-confident in most things.
78. My child has trouble making decisions.
79. My child has had convulsions.
80. Thunder and lightning bother my child.
81. The school says my child needs help in getting along with other children.
82. Lately my child has shown interest in religion.
83. My child loves to hug and kiss.
84. My child often gets up at night.
85. Most of my child's friends are younger than he (she) is.
86. Eating is no problem for my child.
87. Others think my child is "easygoing".
88. Sometimes I think my child's memory has been lost.
89. There is a lot of swearing at our house.
90. I have found out my child has had sex play with the opposite sex.
91. My child never takes the lead in things.
92. My child often asks if I love him (her).
93. My child first sat up before he (she) was one year old.
94. My child would probably take blame rather than lie.
95. My child changes moods quickly.
96. Other children look up to my child as a leader.
97. My child could ride a tricycle by age five years.
98. My child takes criticism easily.
99. My child sometimes gets angry.
100. My child often jumps into things without thinking.
101. My child sometimes hears things others don't hear.
102. My child sometimes swears at me.

GO ON TO THE NEXT PAGE

103. My child is not worried about disease.
104. My child frequently complains of being hot even on cold days.
105. My child's behavior often makes others angry.
106. My child seems bored with school.
107. The child's parents are now separated or divorced.
108. My child gets exhausted so easily.
109. My child belongs to a gang.
110. My child plays a musical instrument.
111. My child often expresses dislike for teachers.
112. My child tends to talk faster than he (she) can think.
113. I can't get my child to do his (her) school lessons.
114. My child stays close to me when we go out.
115. Often my child goes about wringing his (her) hands.
116. My child is sometimes cruel to animals.
117. Recently my child has complained of eye trouble.
118. My child likes to build things from clay or sand.
119. The child's parents have broken up their marriage several times.
120. Sometimes my child runs errands for me.
121. Others think my child is talented.
122. My child is afraid of animals.
123. My child frequently has gas on the stomach (sour stomach).
124. My child is good at lying his (her) way out of trouble.
125. My child often carries a cloth or doll for comfort.
126. The child's parents sometimes forbid the child to play with certain other children.
127. Sometimes my child gets so excited he (she) can't sleep at night.
128. It is not too unlikely that my child will stay in the house for days at a time.
129. My child shows a lot of affection for a pet.
130. My child usually gets up without being called.
131. My child has had brief periods of time when he (she) seems unaware of everything that is going on.
132. My child often cheats other children in deals.
133. The child's parents have to keep after him (her) to do his (her) chores.
134. My child is good at leading games and things.
135. My child is more nervous than most children.
136. My child's feelings are hurt easily.
137. My child usually runs rather than walks.
138. My child sometimes irritates others with practical jokes.
139. My child never played peek-a-boo.
140. My child never worries about what others think.
141. Sometimes my child earns extra money by doing small jobs around the neighborhood.
142. The child's parents try to be as permissive as possible.
143. My child likes to dress like older children.
144. Usually my child eats all the food on his (her) plate.
145. My child is different than most children.
146. A child has a right to disagree with his (her) parents.
147. Others have remarked how polite my child is.
148. My child has original ideas.
149. At one time my child had speech difficulties.
150. My child usually completes something once it is started.
151. My child is afraid of dying.
152. My child carries a weapon (knife, club, etc.).
153. Pestering others is a problem with my child.
154. My child believes in God.
155. My child can cut things with scissors as well as can others of his (her) age.

GO ON TO THE NEXT PAGE

156. I feel I am very close to my child.
157. My child has never been elected to an office in a club or school.
158. My child doesn't seem to care for fun.
159. My child often talks about how strong he (or she) is.
160. At times my child has hit and kicked me.
161. My child sometimes feels things that aren't there.
162. Mistakes are often made by my child just because of hurrying.
163. My child worries about hurting others.
164. My child doesn't seem to care to be with others.
165. My child seems to enjoy talking about nightmares.
166. Others have told me I baby my child.
167. My child has difficulty doing things with his (her) hands.
168. Several times my child has performed in front of a group.
169. Several times my child has asked if he (she) were adopted.
170. Often my child will sleep most of the day on a holiday.
171. Others think my child is mean.
172. My child often stays in his (her) room for hours.
173. My child seems to know everyone in the neighborhood.
174. My child can cry one minute and laugh the next.
175. At times my child scratches his (her) face until it bleeds.
176. Voices sometimes tell my child to do things.
177. Often my child talks back to me.
178. My child has never had any paralysis.
179. My child would never take advantage of others.
180. My child will take the blame for others.
181. My child has to be coaxed or threatened before he (she) will eat.
182. My child has had an operation on his (her) head.
183. My child's allowance is his (her) own to spend.
184. My child usually blames others for any trouble.
185. My child has more than three bowel movements a day.
186. My child can be left home alone without danger.
187. Starting school was very difficult for my child.
188. My child jumps from one thing to another.
189. My child is always talking about the future.
190. My child has been in trouble for attacking others.
191. My child seldom breaks rules.
192. How to raise the child has never been a problem at our house.
193. My child belongs to a club.
194. Several times my child has threatened to kill him (her) self.
195. My child usually doesn't trust others.
196. My child seems too serious minded.
197. My child has more friends than most children.
198. My child cries if left home alone.
199. Often my child goes to the toilet outside the house.
200. Strength impresses my child.
201. My child often hits younger children.
202. My child has many friends of the opposite sex.
203. Often my child does things before thinking.
204. My child seems unhappy about our home life.
205. When my child gets mad, watch out.
206. My child seems shy with the opposite sex.
207. My child never really forgives anyone.
208. My child really has no real friend.

GO ON TO THE NEXT PAGE

209. My child often tells jokes.

210. My child often tattles (tells) on others.

211. My child has never been away from home at night.

212. My child is as happy as ever.

213. Others often remark how moody my child is.

214. We often argue about who is the boss at our house.

215. My child could walk downstairs alone by age five years.

216. Sometimes my child will go into a rage.

217. My child often complains that others don't understand him (her).

218. My child has to be prevented from eating and drinking too much.

219. The trouble with my child is a "chip on the shoulder."

220. My child has very few friends.

221. My child loves to make fun of others.

222. My child likes to play active games and sports.

223. Others often remark how relaxed my child is.

224. Sometimes I worry about my child's lack of concern for other's feelings.

225. Blushing is a problem for my child.

226. Nothing seems to scare my child.

227. My child can wash him (her) self as well as other children his (her) age.

228. Often my child is afraid of little things.

229. Often my child smashes things when angry.

230. My child doesn't seem to be interested in practical things.

231. I have often been embarrassed by my child's sassiness.

232. My child tends to see how much he (she) can get away with.

233. Others think my child is a "cry baby".

234. My child can't seem to keep attention on anything.

235. My child has never been in trouble because of sex behavior.

236. My child almost never argues.

237. My child gives in too easily.

238. Playing with matches is a problem with my child.

239. My child often disobeys me.

240. The child's mother frequently has crying spells.

241. My child cries when scolded.

242. My child is better than average at sports.

243. Falling down is a problem for my child.

244. The child's parents are not active in community affairs.

245. My child likes to show off.

246. My child sometimes chews on his (her) lips until they are sore.

247. My child has never been spanked.

248. My child loves to rock back and forth when sitting down.

249. My child is a good loser.

250. My child loves to stay over night at a friend's house

251. My child usually plays with older children.

252. The child's father changes jobs frequently.

253. My child has a weight problem.

254. School has been easy for my child.

255. Others have said my child has a lot of "personality".

256. Sometimes my child wets the bed.

257. My child goes to bed on time without complaining.

258. My child belongs to Boy Scouts, Girl Scouts or some younger branch of these organizations.

259. "Spare the rod, spoil the child" is a true saying.

260. My child can't sit still in school because of nervousness.

GO ON TO THE NEXT PAGE

261. My child has older brothers or sisters.

262. I do not approve of most of my child's friends.

263. My child vomits frequently after meals.

264. Constipation has never been a problem for my child.

265. My child tells of having the same dream over and over.

266. My child likes to "boss" others around.

267. Reading has been a problem for my child.

268. I sometimes "blow up" at the child.

269. My child doesn't seem to have any fear.

270. Parents should be strict with their children.

271. My child is very jealous of others.

272. Five minutes or less is about all my child will ever sit at one time.

273. My child is often restless.

274. We seldom argue about religion at our house.

275. A scolding is enough to make my child behave.

276. My child seldom misses school because of illness.

277. Frequently my child looks under the bed before going to bed.

278. We frequently argue about money matters at our house.

279. My child often talks about the Devil.

280. Often my child sings around the house.

281. My child sometimes disobeys his (her) parents.

282. My child tends to doubt everything others say.

283. Usually my childs legs or arms are swinging.

284. Several times my child has been in trouble for stealing.

285. My child seldom complains of stomach aches.

286. Neither parent has ever been mentally ill.

287. My child takes sleeping pills to get to sleep.

288. My child has never failed a grade in school.

289. If my child can't run things, he (she) won't play.

290. The child's parents can't seem to live within their income.

291. Others have remarked about my child's unusual imagination.

292. I have heard my child swear at others.

293. The child's parents are often out socially.

294. My child is in a special class in school (for slow learners).

295. At times my child has to be held down because of excitement.

296. Others think my child has a "know it all" attitude.

297. My child usually plays alone.

298. My child won't go into the bedroom without someone else there.

299. Several times my child took money from home without permission.

300. Our family attends Church together.

301. My child often talks to him (her) self.

302. Affection is frequently shown in our home.

303. My child loves to work with numbers.

304. Usually my child sees good in everybody.

305. My child often talks about religion.

306. My child sometimes eats too many sweets.

307. My child has never been in trouble with the police.

308. My child often brings friends home.

309. My child could feed him (her) self fairly well by age five years.

310. My child seldom visits a doctor.

311. My child's favorite stories are fairy tales or nursery rhymes.

312. The child's father doesn't understand the child.

313. Nakedness embarrasses my child.

GO ON TO THE NEXT PAGE

314. Dizzy spells are no problem with my child.

315. My child usually falls right to sleep once in bed.

316. My child learned to count things by age six years.

317. The child's father drinks too much.

318. I have several times found my child masturbating (playing with self sexually.).

319. My child could print his (her) first name by age six years.

320. My child tends to brag.

321. My child doesn't seem to learn from mistakes.

322. My child would rather be with adults than with children his (her) own age.

323. My child can't seem to wait for things like other children do.

324. My child tends to be pretty stubborn.

325. My child rarely gets excited.

326. My child often asks questions about sex.

327. My child gets spanked about once a day.

328. My child seldom talks.

329. My child is constantly moving about.

330. My child is very critical of others.

331. My child seldom gets into mischief.

332. My child always does his (her) homework on time.

333. Sometimes during the night my child will crawl in bed with me.

334. My child often vomits when getting a headache.

335. My child is usually a leader in groups.

336. Sometimes my child lies to avoid embarrassment or punishment.

337. I have a terrible time getting my child to take a bath.

338. Car sickness is a problem with my child.

339. I always worry about my child having an accident when he (she) is out.

340. Other children make fun of my child's different ideas.

341. Our whole family seldom gets to eat together.

342. My child usually stays neat and clean.

343. Reading is my child's favorite pasttime.

344. My child loves excitement.

345. My child is often ashamed of the family.

346. Often my child plays too hard.

347. The child's father usually makes the important decisions at our house.

348. "Bad days" are frequent with my child.

349. My child often visits art museums or attends concerts.

350. My child insists on keeping the light on while sleeping.

351. My child could be trusted to walk upstairs alone before he (she) was four years old.

352. My child seems to prefer adults to children.

353. Sometimes my child's muscles twitch.

354. Much of my child's time is taken up with art or music.

355. My child sometimes smears self and walls after going to the toilet.

356. Punishment is usually given by the child's father.

357. My child never stays out too late at night.

358. My child seldom if ever has dizzy spells.

359. Chewing fingernails is a problem for my child.

360. My child is dependent on others.

361. An interruption is likely to get my child angry.

362. A lot of my child's suggestions as well as actions are very impractical.

363. During the past few years we have moved often.

364. My child worries about talking to others.

365. My child never sleep walks.

GO ON TO THE NEXT PAGE

366. My child first talked before he (she) was two years old.

367. My child gets common colds more often than most children.

368. My child will usually admit being wrong.

369. The child's parents disagree a lot about rearing the child.

370. School teachers complain that my child can't sit still.

371. Often my child locks himself (herself) in the bedroom.

372. My child has some bad habits.

373. Several times my child has spoken of a lump in his (her) throat.

374. "Head in the clouds" describes my child.

375. We often have friends in for a social evening.

376. My child often wakes up screaming.

377. My child drools when eating.

378. My child has been with me since he (she) was born.

379. Often my child will laugh for no apparent reason.

380. My child frequently has nightmares.

381. My child is often the center of attention.

382. My child almost never acts selfishly.

383. My child sometimes skips school.

384. My child is usually in good spirits.

385. The child's parents are active in church.

386. My child seems fearful of blood.

387. My child is not as strong as most children.

388. My child seems more clumsy than other children his (her) age.

389. Others have remarked how self confident my child is in a group.

390. Others often remark how sensible my child is.

391. The child's father seldom helps around the house.

392. My child loves to play in water.

393. Arguing is my childs biggest downfall.

394. My child seems to understand everything that is said.

395. My child will do anything on a dare.

396. My child always seems to have a cold.

397. At times my child just keeps on spinning around.

398. Sometimes the child's father will go away for days after an argument.

399. Sometimes my child gets so nervous his (her) hands shake.

400. Skin rash has been a problem with my child.

401. I have often found my child playing in the toilet.

402. The child's father sometimes gets drunk and mean.

403. My child often plays sports.

404. My child sometimes becomes envious of the possessions or good fortune of others.

405. Shyness is my child's biggest trouble.

406. My child often talks in rhymes.

407. The child's mother makes most of the important decisions in the home.

408. My child will do anything for a laugh.

409. My child is a healthy child.

410. My child thinks others are ploting against him (or her.)

411. My child has difficulty holding his (her) head up.

412. Usually my child gets along well with others.

413. The child's parents do not get along with the neighbors.

414. My child seems eager to please others.

415. My child seems to have no shame.

416. Usually my child plays inside.

417. The child's father seldom misses work.

GO ON TO THE NEXT PAGE

418. My child gets lost easily.

419. My child has the habit of picking his (her) nose until it bleeds.

420. My child has had asthma attacks.

421. My child is put to bed early if he (she) disturbs the rest of the family.

422. Often my child takes walks alone.

423. My child often has headaches.

424. The child's parents have set firm rules that must be obeyed.

425. Often my child will wander about aimlessly.

426. My child seems to get along with everyone.

427. My child is easily embarrassed.

428. My child is very popular with other children.

429. My child gets confused easily.

430. The child's father dislikes his present job.

431. My child is almost always smiling.

432. My child has more accidents resulting in cuts, bruises, and broken bones than other children.

433. Several times my child has threatened to run away.

434. At times my child has difficulty breathing.

435. There is always a lot of argument at our dinner table.

436. Others don't understand my child.

437. My child plays with friends who are often in trouble.

438. My child seldom has nose bleeds.

439. My child often talks of loving someone much older.

440. Parents should teach their children who is boss.

441. My child has never been expelled from school.

442. Sometimes my child acts like a clown.

443. My child loses most friends because of his (or her) temper.

444. Our house is always in a mess.

445. My child whines a lot.

446. My child is shy with children his (her) own age.

447. My child doesn't seem to feel pain like others.

448. My child was difficult to toilet train.

449. My child wants a lot of attention when sick.

450. My child saves most of his (her) spending money.

451. The child's mother or father have never been divorced.

452. My child can count change when buying something.

453. Winning a game seems more important than the fun of playing to my child.

454. The child's mother strongly dislikes housework.

455. My child has never run away from home.

456. My child needs laxitives.

457. My child shows unusual talent.

458. A mother's place is in the home.

459. Speaking up is no problem for my child.

460. I had an especially difficult time with temper tantrums in my child at an early age.

461. My child worries a lot about physical health.

462. My child can tell the time fairly well.

463. Sometimes my child comes home with torn clothes.

464. Sharing things has been no problem for my child.

465. Many times my child has become violent.

466. The child's parents always discuss important matters before making a decision.

467. I have a problem stopping my child from eating everything.

468. The child's mother can't stand to stay home all day.

469. Murder and crime stories seem to be my child's favorites.

470. My child insists on polished shoes.

471. My child can take a bath by him (her) self.

GO ON TO THE NEXT PAGE

472. My child smokes at home.
473. Recently my child has complained of chest pains.
474. The child's father frequently "blows up" at the child.
475. My child sees strange things.
476. My child is shy with adults.
477. Before going to sleep my child needs a teddy bear or doll in bed.
478. Frequently my child argues with others.
479. I have heard that my child drinks alcohol.
480. There is seldom a need to correct or criticize my child.
481. My child is rather absent-minded.
482. Others have remarked how pale my child looks.
483. My child bites his (her) fingernails or toenails.
484. The child's father is home almost every evening.
485. My child repeats numbers and letters over and over.
486. My child is always telling lies.
487. Recently the child's parents have argued with the school officials.
488. When talking my child often jumps from one topic to another.
489. By the age of five years, my child could dress him (her) self except for tying things.
490. My child most always tells me where he (she) is going to play.
491. The child's parents seldom visit the school.
492. My child boasts about being sent to the principal in school.
493. My child never has fainting spells.
494. My child is crabby most of the time.
495. My child spends over fifteen minutes at a time combing his (her) hair.
496. Music lessons have to be forced on my child.
497. The child's father is too strict with the child.
498. My child has as much pep and energy as most children.
499. Recently the school has sent home notes about my child's bad behavior.
500. A parent should try to treat a child as an equal.
501. My child often has unusual ideas.
502. My child will never clean his (or her) room.
503. Sometimes my child will put off doing a chore.
504. My child is able to keep out of everyday dangers.
505. My child often talks about death.
506. My child usually does just what you tell him (her) not to do.
507. My child has frequently been hospitalized.
508. My child likes parties.
509. My child always shows affection to me.
510. The child's father gets along fine with the child.
511. Sex seems to concern my child more than others.
512. My child is usually rested after a good sleep.
513. My child has been difficult to manage.
514. Children should be seen and not heard.
515. Hardly a day goes by when my child doesn't get into a fight.
516. My child often sits and reads the dictionary.
517. Others say our family is close.
518. Working puzzles is one of my child's favorite hobbies.
519. Most of my child's time is taken up watching television.
520. Frequently my child has a high fever.
521. Sometimes my child's room is messy.
522. I have seen my child laugh when others get hurt.
523. My child often talks of flying off into space.
524. Sometimes my child irritates me.

GO ON TO THE NEXT PAGE

525. Often my child tells fantastic stories.

526. The child's father is hardly ever home.

527. My child is seldom short of breath.

528. Sometimes I don't understand what my child means.

529. My child usually feels sorry when he (or she) has hurt others.

530. My child is usually afraid to meet new people.

531. My child almost never needs punishing or scolding.

532. My child speaks of him (her) self as stupid or dumb.

533. My child could eat with a fork before age four years.

534. Often my child complains of blurring (blurred vision).

535. There is a lot of tension in our home.

536. My child needs protection from every day dangers.

537. My child has a terrible temper.

538. My child daydreams quite a bit.

539. It is necessary for the child's mother to work outside the home.

540. Several times my child has threatened to kill others.

541. The child's father spends very little time with the child.

542. My child refuses to do anything around the house.

543. My child usually stays mad a long time.

544. My child needs help when going to the toilet.

545. My child is adopted.

546. My child runs around the house naked.

547. My child always insists on wearing clean clothes.

548. My child respects the property of others.

549. My child seldom has back pains.

550. Frequently my child will put his (her) hands over his (her) ears.

551. The child's father has very little patience with the child.

552. My child wants to sit in the bath tub for hours.

553. The child's father has held the same job for the last five years (or since marriage).

554. I have no trouble getting my child to bed at night.

555. My child often speaks of being smarter than others.

556. My child loves to read about murder and other crimes.

557. My child didn't have colic as an infant.

558. My child learned to drink from a cup by age three years.

559. The child's parents frequently quarrel.

560. Often my child sets goals that are too high.

561. My child's headaches usually start with a pain in the back of the neck.

562. Everything has to be perfect or my child isn't satisfied.

563. The child's parents belong to several clubs or community groups.

564. My child gets pneumonia almost every year.

565. Spanking doesn't seem to affect my child.

566. Lately my child has had diarrhea a lot.

567. My child was a "planned" child.

568. My child talks a lot about his (her) size or weight.

569. My child tends to repeat everything (parroting).

570. My child has never had face twitchings.

571. My child was completely toilet trained by three years of age.

572. My child often will cry for no apparent reason.

573. Both parents enjoy children.

574. My child seldom talks about sickness.

575. My child tends to swallow food without chewing it.

576. My child will worry a lot before starting something new.

577. My child is afraid of strangers.

GO ON TO THE NEXT PAGE

578. My child has trouble swallowing.
579. My child had difficulty breathing at birth.
580. My child shows a lot of interest in fire.
581. My child usually looks at the bright side of things.
582. My child is afraid of the dark.
583. Our marriage has been very unstable (shaky).
584. My child usually keeps his (her) mouth open.
585. My child often has crying spells.
586. My child often talks about the future.
587. My child never seems to have a goal.
588. Sometimes my child gets hot all over without reason.
589. Nothing seems to get my child upset.
590. Delivery of my child was with instruments.
591. Often my child will lick his (her)lips.
592. My child seems tired most of the time.
593. My child refused or couldn't suck as an infant.
594. My child is exceptionally neat and clean.
595. Others have remarked how smart my child is.
596. My child takes illness harder than most children.
597. My child was a premature or over-due baby.
598. Money seems to be my child's biggest interest.
599. My child goes on dates with the opposite sex.
600. Usually my child will sleep all night without awakening.

END

SEMANTIC DIFFERENTIAL SCALE

INSTRUCTIONS: At the top of each page of this booklet you will find a different thing to be judged, and beneath it fourteen sets of words which we would like you to use in making your judgements. For an example, look at the next page. To give you practice using the scale, we would like you to judge a "SWAN." The word appears at the top of the page.

If you think a SWAN is very HAPPY or very SAD, place a check mark directly above the short line closest to the word HAPPY or the word SAD.

1. HAPPY X ____ ____ ____ ____ ____ ____ SAD

or

1. HAPPY ____ ____ ____ ____ ____ ____ X SAD

If you think that a SWAN is somewhat HAPPY or somewhat SAD, please place a check mark above one of the lines closer to the center, as follows:

1. HAPPY ____ X ____ ____ ____ ____ ____ SAD

or

1. HAPPY ____ ____ ____ ____ ____ X ____ SAD

If you think that a SWAN is only slightly HAPPY or slightly SAD, you would put your check mark in one of the following positions:

1. HAPPY ____ ____ X ____ ____ ____ ____ SAD

or

1. HAPPY ____ ____ ____ ____ X ____ ____ SAD

If you think that a SWAN is neither HAPPY nor SAD, or that a SWAN is as HAPPY as it is SAD, you would place your check mark above the middle short line.

1. HAPPY ____ ____ ____ X ____ ____ ____ SAD

In the same way, we would like you to give us your judgements on SWAN using the remaining 13 pairs of words: GOOD - BAD, SOCIABLE - UNSOCIABLE, and so on, until you have completed the page. Please do the pages in order, and in each case complete the entire page. On all of these, we are interested mainly in your FIRST opinions. Therefore, we ask you to work as rapidly as possible.

SWAN

		very	some what	slightly	neither or equal	slightly	some what	very	
1.	HAPPY	____	____	____	____	____	____	____	SAD
2.	GOOD	____	____	____	____	____	____	____	BAD
3.	SOCIABLE	____	____	____	____	____	____	____	UNSOCIABLE
4.	INEFFECTIVE	____	____	____	____	____	____	____	EFFECTIVE
5.	CRUEL	____	____	____	____	____	____	____	KIND
6.	FOOLISH	____	____	____	____	____	____	____	WISE
7.	BEAUTIFUL	____	____	____	____	____	____	____	UGLY
8.	PLEASANT	____	____	____	____	____	____	____	UNPLEASANT
9.	WORTHLESS	____	____	____	____	____	____	____	VALUABLE
10.	SOFT	____	____	____	____	____	____	____	HARD
11.	DANGEROUS	____	____	____	____	____	____	____	SAFE
12.	STRONG	____	____	____	____	____	____	____	WEAK
13.	SLOW	____	____	____	____	____	____	____	FAST
14.	ACTIVE	____	____	____	____	____	____	____	PASSIVE

YOUR CHILD
(the one on whom you filled out
the other test materials)

		very	some what	slightly	neither or equal	slightly	some what	very	
1.	HAPPY	____	____	____	____	____	____	____	SAD
2.	GOOD	____	____	____	____	____	____	____	BAD
3.	SOCIABLE	____	____	____	____	____	____	____	UNSOCIABLE
4.	INEFFECTIVE	____	____	____	____	____	____	____	EFFECTIVE
5.	CRUEL	____	____	____	____	____	____	____	KIND
6.	FOOLISH	____	____	____	____	____	____	____	WISE
7.	BEAUTIFUL	____	____	____	____	____	____	____	UGLY
8.	PLEASANT	____	____	____	____	____	____	____	UNPLEASANT
9.	WORTHLESS	____	____	____	____	____	____	____	VALUABLE
10.	SOFT	____	____	____	____	____	____	____	HARD
11.	DANGEROUS	____	____	____	____	____	____	____	SAFE
12.	STRONG	____	____	____	____	____	____	____	WEAK
13.	SLOW	____	____	____	____	____	____	____	FAST
14.	ACTIVE	____	____	____	____	____	____	____	PASSIVE

YOURSELF

		very	some what	slightly	neither or equal	slightly	some what	very	
1.	HAPPY	____	____	____	____	____	____	____	SAD
2.	GOOD	____	____	____	____	____	____	____	BAD
3.	SOCIABLE	____	____	____	____	____	____	____	UNSOCIABLE
4.	INEFFECTIVE	____	____	____	____	____	____	____	EFFECTIVE
5.	CRUEL	____	____	____	____	____	____	____	KIND
6.	FOOLISH	____	____	____	____	____	____	____	WISE
7.	BEAUTIFUL	____	____	____	____	____	____	____	UGLY
8.	PLEASANT	____	____	____	____	____	____	____	UNPLEASANT
9.	WORTHLESS	____	____	____	____	____	____	____	VALUABLE
10.	SOFT	____	____	____	____	____	____	____	HARD
11.	DANGEROUS	____	____	____	____	____	____	____	SAFE
12.	STRONG	____	____	____	____	____	____	____	WEAK
13.	SLOW	____	____	____	____	____	____	____	FAST
14.	ACTIVE	____	____	____	____	____	____	____	PASSIVE

PARENT DATA SHEET I.D. No._____

Age_____Date of Birth_____

Marital Status_____Highest School Grade_____

Current Employment_____

Spouse's Employment_____

Average Annual Family Income_____

Sex and Ages of Children_____

_____

_____

Age of Child Participating in Study_____Date of Birth_____

Sex of Child_____

School Grade_____Regular Classroom? Yes No

If no, please describe_____

Trouble with the Law? Yes No If yes, please describe _____

_____

Have you ever brought this child to see a mental health worker (Psychiatrist, Psychologist, or Social Worker)? Yes No

If yes, who suggested that the child go?_____

Did you agree?_____

What was the primary concern?_____

Describe the nature and length of treatment, if any_____

_____

APPENDIX B

Henry Ford Hospital
GENERAL MEMO

CONSENT FORM

Participant's Name_____

1. I have been asked to participate in a research study which will involve completing a standard personality test, filling out a personality inventory on my adolescent child, and answering a brief questionnaire. I understand that it will take me about 2½ hours to complete these tests.

2. I am aware that these tests will provide some information about my personality. I am also aware that my participation will assist the researcher in analyzing the usefulness of a personality test for children and adolescents.

3. I am aware that my answers and scores on these tests will be kept strictly private. I understand that my name will not appear on any test sheet but instead a code number will be used to identify my responses.

4. I understand that the tests do not carry any significant risk other than some possible discomfort due to mild anxiety or fatigue.

5. All of these things have been explained to me by Dr. DeHorn or Claudia Beversluis and they have offered to answer any questions I may have during the research.

6. In giving my consent I acknowledge that my participation is voluntary and that I may withdraw from the study at any time. I realize that deciding not to participate in this study would have no effect on my medical treatment.

7. I understand that there is no federal, state, or private program established to provide research subjects with compensation and medical treatment costs for physical injury resulting from research procedures.

DATE:_____ _____
Signature of Voluntary Subject

_____ _____
Investigator

Witness not associated with research study but present during explanation to the voluntary subject.

Henry Ford Hospital

GENERAL MEMO

CONSENT FORM

Participant's Name_____

Parent's Name_____

1. I have been asked to allow my child, _____, to participate in a research study which will involve his/her completion of a standard personality test. I understand that it will take him/her between 1 and 2 hours to complete this test. I give my permission for his/her participation.

2. I am aware that this test will provide some information about my child's personality. I am also aware that his/her participation will assist the researcher in analyzing the usefulness of a personality test for children and adolescents.

3. I am aware that my child's answers and scores on this test will be kept strictly private. I understand that his/her name will not appear on any test sheet but instead a code number will be used to identify his/her responses. I also understand that I will not have access to any information or scores provided by my child.

4. I understand that the tests do not carry any significant risk other than some possible discomfort due to anxiety or fatigue.

5. All of these things have been explained to me by Dr. DeHorn or Claudia Beversluis and they have offered to answer any questions I or my child may have during the research.

6. In giving my consent I acknowledge that my child's participation is voluntary and that we may withdraw this consent at any time, with affecting our medical treatment.

7. I understand that there is no federal, state, or private program established to provide research subjects with compensation and medical treatment costs for physical injury resulting from research procedures.

DATE:_____ _____
Signature of Voluntary Subject

_____ _____
Investigator Signature of Parent

_____
Witness not associated with research study but present during explanation

PINE REST
CHRISTIAN
HOSPITAL
6850 S. DIVISION AVE
GRAND RAPIDS
MICH. 49508 • 455-5000

Research Release Form

Participant Names_____

The staff of Pine Rest Christian Hospital is committed to providing the best possible mental health services to each person coming to us. One of the ways we do this is to subject our programs and treatment methods to study and analysis through ongoing research activity. We ask your cooperation in this activity through your participation in a study currently being done in the Children and Adolescent Division.

This study will investigate the relationships between several psychological tests which we frequently use in our evaluation process.

In giving your consent to participate in the study, you are agreeing:

- to complete the test materials required by the study. Specifically, for the mother this involves completing a personality test on herself, a personality test on her adolescent child, and completing an additional brief questionnaire. For the adolescent, this involves completing a personality test on him/herself.

- that all the data obtained during this research will be kept confidential, and your identity will be removed from all data before it is used in the research project.

- that you have a right to obtain feedback about your own test results, but cannot obtain feedback about the results obtained by your mother/child.

- that you can refuse to participate at any time during the study.

I hereby consent to my participation in this study, and to the participation of my adolescent child in this study.

Signed (mother)_____

Date_____

I hereby consent to my participation in this study.

Signed (adolescent)_____

Date_____

Witness_____

APPROVAL SHEET

The dissertation submitted by Claudia DeVries Beversluis has been read and approved by the following committee:

Dr. Patricia A. Rupert, Director
Assistant Professor, Psychology, Loyola

Dr. Alan S. DeWolfe
Professor, Psychology, Loyola

Dr. Joseph A. Durlak
Associate Professor, Psychology, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April 13, 1984
Date

Patricia A. Rupert
Director's Signature