1974

Sex-Role Development in Psychiatrically Disturbed Adolescent Males and Their Parents

Arnold Charles Small
University of Rhode Island

Follow this and additional works at: https://digitalcommons.uri.edu/oa_diss

Recommended Citation

Small, Arnold Charles, "Sex-Role Development in Psychiatrically Disturbed Adolescent Males and Their Parents" (1974). *Open Access Dissertations*. Paper 1064.
https://digitalcommons.uri.edu/oa_diss/1064

This Dissertation is brought to you for free and open access by DigitalCommons@URI. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu.

SEX-ROLE DEVELOPMENT IN PSYCHIATRICALY DISTURBED
ADOLESCENT MALES AND THEIR PARENTS

BY

ARNOLD CHARLES SMALL

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

1974

ABSTRACT

Seventeen antisocial, 17 mixed psychiatric, and 17 normal adolescents were compared in regard to their sex-role development. It was hypothesized that antisocial adolescents would display a more feminine unconscious sex-role identity and more conscious masculinity than normal adolescents, with the mixed group intermediate between the two. Also, their perceptions of the sex-role behavior of their parents were examined. It was expected that the disturbed groups would perceive greater sex-role inappropriateness in their parents. Lastly, they were compared for the possession of certain personality traits traditionally classified as masculine or feminine.

The fathers and mothers of the adolescents were also compared for their sex-role development. The fathers were expected to score in a manner similar to their sons. Mothers were expected to show the reverse pattern. All subjects were given the Franck Drawing Completion Test, Adjective Check List, and the Femininity Scale of the California Psychological Inventory. In addition, the adolescents were given the Parental Description Survey, and the parents were asked to fill out the Adjective

Check List another time, this time checking those adjectives they would ideally like their sons to have.

No differences were found between any of the groups on sex-role identity and preference. The normal adolescents were more dominating, enduring, and nurturant than the mixed group, but only more enduring than the antisocial group. Fathers did not differ on any of the self-descript scales. Mothers of the normals had higher heterosexuality and affiliation scores, and lower succorance and abasement scores than the other groups of mothers. There were no differences on the Parental Description Survey among the adolescents.

Fathers differed from each other on the ideal characteristics they would like their sons to have. Fathers of the normals wanted their sons to be more achieving and dominating than the fathers of the mixed and antisocial adolescents, and more enduring than the fathers of the latter. Mothers differed from each other on achievement and endurance, two of the three traits that their spouses differed on. Mothers of normals expected their sons to be more enduring than the other mothers and more achieving than the mothers of the mixed group.

Although there were no differences between the groups on many of the variables, the use of fourteen pre-selected predictor variables accurately classified the adolescents

utilized in this study into their appropriate group. The use of twenty-four pre-selected predictor variables clearly differentiated the mothers and also the fathers in a manner consistent with their sons' placements.

The results of this study suggest that the possession of certain characteristics, such as dominance and endurance, appear to be important for more adequate functioning in adolescent males. It is likely that those individuals who possess these traits receive more reinforcements from society than those who do not. Parents of these boys desire and perhaps reinforce these traits in their sons to a greater extent than other parents, and the latter, by not reinforcing these traits as much, may make it more difficult for their sons to achieve an adequate adjustment.

ACKNOWLEDGEMENTS

I sincerely thank the people who helped obtain subjects for this study. Their cooperation in eliciting peoples' approval to participate in the study, and their aid in scheduling and allowing the use of their facilities was indispensable. Oft times, the testing of subjects necessitated the cooperation and help of a few people, and their unhesitating manner to accommodate me was most gratifying. Of course, the people who participated are owed the greatest appreciation. Although participation was on a volunteer basis, and it was during a time of restricted means of traveling, they were willing to make an extra trip and participate in the study.

My committee members, Drs. Prochaska, Biller, Berman, Merenda and Gunning also are deserving of my gratitude. Their many hours of working with me and providing new ideas, made this project something that was enjoyable and exciting.

Finally, to my wife Natalie, I reaffirm my love. Not only did she function as messenger, secretary, and sounding board, she also provided support and encouragement when needed.

TABLE OF CONTENTS

INTRODUCTION.....	1
Sex-Role Development and Psychopathology in Adults	
Sex-Role Development and Identification in	
Antisocial Adolescents	
Perception of Parental Sex-Role Behavior	
Conceptualizations of Sex-Role	
STATEMENT OF THE PROBLEM.....	24
Hypotheses	
METHODOLOGY.....	31
Subjects	
Measures	
Franck Drawing Completion Test	
The Femininity Scale of the California	
Psychological Inventory	
The Adjective Check List	
Heilbrun's Parental Description Survey	
Procedure	
RESULTS.....	44
Psychosocial Data	
Sex-Role Development	
Perception of Parental Sex-Role Behavior	
Personality Traits - Adolescents	
Personality Traits - Fathers	
Personality Traits - Mothers	
Classification - Adolescents	
Classification - Fathers	
Classification - Mothers	
DISCUSSION.....	65
Personality Trait Differences	
Sex-Role Identity	
Perception of Parental Sex-Role Behavior	
Discriminant Analysis	
Limitations and Conclusions	

APPENDIXES.....	77
BIBLIOGRAPHY.....	88

LIST OF TABLES

Table	Page
1. Discriminant Equations For The Adolescents.....	55
2. Classification Matrix For The Adolescents.....	56
3. Discriminant Equations For The Fathers.....	59
4. Classification Matrix For The Fathers.....	60
5. Discriminant Equations For The Mothers.....	62
6. Classification Matrix For The Mothers.....	63

INTRODUCTION

Socialization of role differentiation is a continuous process that begins at birth. Traditionally, boys have been encouraged to be aggressive, competitive, and independent, and girls have been rewarded for passivity and dependency. During infancy, sex-role stereotyping begins when different colors signify the sex of the child; later, toys and books reinforce the role of boys as aggressive and active, and girls as passive and receiving (Hole and Levine, 1971). Eliasberg (1972), among others, noted the fear and anxiety in the parents of girls who engage in sports or excel in math or science, while the same emotions are elicited in parents of boys who enjoy music or poetry or doing dishes.

The new awareness and consciousness of contemporary women, however, has given the impetus to the belief that culturally imposed roles are narrow and unresponsive to modern society (Lott, 1973) and there is a movement away from the assigning of traditional characteristics and social roles. With the increasing challenge to the importance of traditional sex-role stereotyping, it is necessary to further examine the relationship between sex-role development and psychopathology. If a consistent relationship is found, then it might mitigate against moving away from traditional

sex-roles; conversely, if no relationship is found, then the shedding of traditional sex-role may be efficacious.

In response to this important issue, this study was directed at further examining the relationship between psychopathology and sex-role development. More specifically, this study was designed to examine the sex-role development of adolescents referred to outpatient clinics for a variety of psychological problems, their perceptions of the sex-role behavior of their parents, the sex-role development of the parents of these adolescents, and the sex-linked personality characteristics that the parents of these adolescents would ideally like them to have.

Sex-Role Development and Psychopathology in Adults

The failure to develop an appropriate and stable sex-role has long been regarded as a contributing etiological agent in various forms of psychopathology. Though not explicitly stated, much of the early work also infers that there is a positive relationship between the degree of psychopathology and the degree of sex-role confusion, i.e. the greater the degree of psychopathology, the greater the degree of sex-role confusion. The early writings in this area were based mostly on psychoanalytic theory, and the relationships and inferences were based not on empirical research, but on observations or data from the psychoanalysis. Of late, empirical research has begun to accumulate that does indeed substantiate the early claims of a positive relation-

ship between disturbances in sex-role development and inadequate personality functioning (e.g. Kayton and Biller, 1971). However, due to the short history of empirical research in this area, whether a disturbance in sex-role development is an etiological factor in the development of psychopathology has not been determined. It is generally recognized, however, that a disturbance in sex-role development is a basic characteristic found among those with a wide variety of psychological difficulties.

Echoed by many, but not as succinctly stated, are the following statements by Lidz and Mowrer that clearly attest to the importance of an appropriate sex-role identity in relation to adequate personality functioning. Lidz (1963) states that

Security of sexual identity is a cardinal factor in the achievement of a stable ego identity. Of all factors entering into the formation of personality characteristics, the sex of the child is the most decisive. Confusions and dissatisfactions concerning sexual identity can contribute to the etiology of many neuroses and character defects as well as perversions. Probably all schizophrenic patients are seriously confused in this area (p.67).

Mowrer (1950) said much the same thing:

Personal normality presupposes that an individual has assimilated not only those values and ideals which are regarded as necessary and proper for all persons, but also those values and ideals which are uniquely appropriate to one's sex role, as a man or as a woman (p.615).

Many of the observations and studies in this area have involved the study of the sex-role functioning of adult

schizophrenics and comparing them with others manifesting a different form or degree of psychopathology. One of the earliest empirical studies involving a psychiatric population was that of Bosselman and Skorodin (1940). Assessing the sex-role interests and attitudes of adult psychotic patients by using the Terman-Miles Analysis, they found that of the male schizophrenics, 66.6 per cent "deviated to the feminine side" and 33.3 per cent "deviated to the masculine side." Of the female schizophrenics, 71.2 per cent "deviated to the masculine side" and 28.8 per cent "deviated to the feminine side (p.700)."

Zeichner (1955) utilized projective devices (Rorschach and TAT) to examine attitudes related to psychosexual identification and the concept of sexual role. In this and in his following study, Zeichner compared adult male paranoid schizophrenics, "non-paranoid" schizophrenics, and normal controls (hospitalized for non-psychiatric reasons). Specifically, he investigated the degree of sex-role confusion and alienation, and the psychosexual identification of these groups. Rorschach content and specific determinants (e.g. movement) were studied, as well as themes elicited by the TAT. Disturbances in sex-role were defined in terms of response ambiguity and a feminine identification was judged when the content was of a feminine nature. Zeichner found that the schizophrenic groups displayed a significantly greater psychosexual confusion in comparison to the normal

group. The non-paranoid group, however, revealed a greater degree of psychosexual confusion than the paranoid group. Also, the schizophrenic groups exhibited a significantly greater feminine identification than the normal group, with the paranoid group differing significantly in the direction of a more feminine identification than the non-paranoid group.

In another study using the same types of groups and instruments, Zeichner (1956) found that the two schizophrenic groups differed from the normal controls (but not from each other) in their interpretation of the masculine role, but not of the feminine role, i.e. the schizophrenic groups conceptualized the masculine role differently than did the normal group. For example, the schizophrenic groups saw the male figure in the TAT significantly more often in conflict over dependence-independence in relation to females than did the normals.

Using the semantic differential as a means of determining parental and sex-role identification, Beitner (1961) compared hospitalized male paranoid schizophrenics and tuberculosis patients, anxiety neurotic outpatients, and normal controls (employees of business firms). Profile differences between words such as "me" with "father" or "mother" or "man" or "woman" were used to determine parental and sex-role identification. The results suggested that although both the paranoid schizophrenic and anxiety neurotic group

had a generally poor identification with both parents, confusion in sexual identification was only found in the anxiety neurotics. Thus, the results are taken by Beitner to contradict the "common clinical assumption that confusion in sexual identification, or an identification with the opposite sexed parent constitutes an essential etiological factor in paranoid schizophrenia (p. 292)."

In a study which provided no control or normative data, Planansky and Johnson (1962) found that in their sample of 150 male patients with "functional psychosis", 15 percent reported doubts concerning their sexual identity during "patient interviews of various sorts." For an additional 13 percent of the sample, psychological test results indicated definite "signs" of sex-role confusion. Also, the psychotic men were characterized as more "passive" than normals.

Cheek (1964), in a study of young adult schizophrenics, found a sex-role reversal. Interaction profiles suggested that males who became schizophrenic tended toward withdrawal and intratensive behavior i.e. interaction profiles showed low total activity rates and low dominance behaviors. Female schizophrenics exhibited a more overtly emotional behavior pattern. Since developmental data indicated that the males were passive and females active from childhood, Cheek felt that the reversal was not a function of the disease process. In an earlier study, Gross (1959) obtained

the same results with different instruments.

Consistent with Cheek's (1964) findings, Lorr, O'Connor, and Stafford (1960) found that psychotic women tend to be assertive and show interpersonally disruptive behavior, opposite of what is expected. The results of Lorr and Klett (1965) were also similar. They found that psychotic women showed more excitement than psychotic men with the latter more apathetic.

Using Burton and Whiting's (1961) assumption of the existence of a primary and secondary cross-sex identity as a basis, McClelland and Watt (1968) studied sex-role alienation in schizophrenics. Briefly, Burton and Whiting (1961) proposed that there are levels of sex-role identity: a primary sex-role identity that is unconscious, acquired preverbally, and has to do with sensing oneself as a male or female, and a secondary sex-role formed as a consequence of learning and related to attitudes and interests.

McClelland and Watt (1968) compared a male and female group of chronic schizophrenics to a group of housewives, employed females and normal males on a variety of measures designed to tap the unconscious and conscious aspects of sex-role identity (unconscious: Whiting Figure Preference Test, Role Preference Test, and Body Parts Satisfaction Test; conscious: questionnaire and interview). They found that male schizophrenics avoid assertive male identities and have a greater concern for their appearance than for mascu-

line body parts. Schizophrenic females showed less concern for all parts of their bodies. Thus, on measures designed to tap the more unconscious and primary levels of sex-role identity, sex-role alienation among the schizophrenics was found. That the authors felt that it was sex-role alienation and not a sex-role reversal was due to the fact that the schizophrenics, though expressing what appears to be opposite sex choices, were still not reacting exactly like normals of the opposite sex. Conscious interests and attitudes of schizophrenics were normally sex-typed.

On the basis of their findings, McClelland and Watt (1968) suggested that instead of two levels of sex-role identity as postulated by Burton and Whiting (1961), there are three. At the most basic primary level is "gender identity", an unconscious schema that pertains to the "experience of one's self as male or female (p. 237)." The second level is "sex-role style", characterized by an assertiveness in men and yielding in women. The third, most superficial level, is that of sex-typed interests. Whereas they suggest that schizophrenics have a disturbance in the most basic level, they speculate that disturbances in the secondary level may result in neuroses, and disturbances in the tertiary level may lead to social maladjustments.

A later study by Elfert (1972), modelled after the study of McClelland and Watt (1968), failed to confirm some of the latter's findings. On the tertiary level of sex-typed interests and attitudes, all groups responded in a

sex-appropriate manner, supporting McClelland and Watt. However, on the secondary level of sex-role style, McClelland and Watt's previous findings that schizophrenics were alienated at this level failed to achieve support. On the primary, most basic level of sex-role identity, no significant differences were found between neurotics and schizophrenics on the Body Parts Satisfaction Test, which provided differences for McClelland and Watt.

Kayton and Biller (1972) compared the sex-role development of adult, male non-paranoid schizophrenics, paranoid schizophrenics, neurotics, and normals. All subjects lived with both parents during childhood. The disturbed groups were found to be less masculine on the sex-role measures (Adjective Check List and Gough's Femininity Scale) than the normals. Partial support was obtained for the hypothesis that the most disturbed groups will show the most sex-role disturbance.

Comparing ten first admission good pre-morbid schizophrenic state hospital patients with ten nonschizophrenic residents of a neighboring community, Biller and Poey (1969) found that male schizophrenics were only slightly deficient in knowing what constitutes masculine and feminine characteristics, but were poor in their ability to depict maleness and femaleness, which the authors feel may be an indication of a deeper level sex-role disturbance.

Though informative, these studies leave many questions

unanswered. The most important is whether the lack of an appropriate sex-role is an etiological agent in the development of psychopathology or whether the pathology in some way brings about a change in the sex-role identification of the individual. Also, the populations in the studies reported are narrow, with the target population being limited mostly to hospitalized, adult schizophrenics, generally males. It is conceivable that a sexist attitude permeates the diagnostic process of individuals displaying psychopathology, i.e. adult males who exhibit traditional feminine characteristics and interests may be diagnosed more disturbed and would more likely be in a hospital than those displaying similar pathology but who exhibit traditional masculine characteristics and interests; on the other hand, it may be true that showing traditional feminine characteristics is more pathological.

By studying the sex-role development of adolescents rather than adults, a step earlier in the developmental process is made. Although not definitive, it may provide some information as to whether a disturbance in sex-role development is an etiological agent, and also whether the same relationships found in adults holds true for adolescents. Furthermore, by studying a group of antisocial adolescents, the issue of whether males are judged more pathological due to exhibiting traditional feminine behaviors does not apply, since the behaviors these boys engage in are traditionally

considered to be more masculine. Also, by studying a number of adolescents with a variety of psychological problems, a move to provide more generality of results is undertaken.

Sex-Role Development and Identification in
Antisocial Adolescents

Whereas the identification process in aggressive, acting out children and adolescents has been written upon rather extensively (e.g. Bandura and Walters, 1959), their sex-role development and identity has not been. Although identification and sex-role identity are integrally related and not mutually exclusive, sex-role identity is generally seen as one aspect of identification. For example, Kagan (1964) states:

The degree to which an individual regards himself as masculine or feminine will be called his sex-role identity. This belief is but one component of a complex interlocking set of beliefs the individual holds about himself. The complete set of attitudes is generally regarded as a self-concept or self-identity. Although the individual's assessment of his masculinity or femininity comprises only one aspect of his identity. . . (p. 144).

Due to the extremely small number of empirical studies that measure the sex-role identity in aggressive boys and the fact that sex-role development and identification are not mutually exclusive, studies that deal both with sex-role and with the broader issue of identification will be reviewed.

Empirical research into the more specific topic of sex-role identity, as previously mentioned, is scarce. Albert (1970) studied the sex-role identification of two different

criminal typologies: male property offenders and person offenders. He predicted that the person offender group would exhibit a more masculine identification than the property offender group, and the latter would exhibit a more feminine identification. None of the predictions were confirmed. Unfortunately, Albert's study did not include a control group.

In a quasi-experimental study, Rosenfeld (1969) investigated the relationship between sexual identification and delinquency in adolescents. The sample consisted of three groups of twenty boys per group: a non-delinquent group of boys drawn from a public high school with no history of being adjudicated for delinquent behaviors, a group of delinquents on probation with no more than two adjudications for delinquency, and a group of institutionalized delinquents who had no fewer than three adjudications. Rosenfeld utilized the Franck Drawing Completion Test and the Gough Femininity Scale to measure unconscious and conscious sex-role identity respectively. He found that the delinquents displayed a more unconscious femininity than the non-delinquents, but exhibited a more conscious masculinity than the non-delinquents. Level of delinquency made no difference, since on no occasion were there differences between the delinquent groups. Thus his hypothesis that the greater the degree of delinquency, the greater would be the degree of unconscious femininity and conscious masculinity failed

to achieve support. Rosenfeld interprets the finding that the delinquents manifest a more conscious masculinity in that the "delinquents defend against a high degree of unconscious femininity by a form of hypermasculine restitution of which acting out is one manifestation (p. 21)."

Turning to studies concerning identification, one of the more consistent findings is that the aggressive, acting-out adolescent (hereafter referred to as "antisocial") tend to identify less with their fathers than do normals. Glueck and Glueck (1950) found that the delinquent boys they studied did not identify with or strive to emulate their fathers as much as the non-delinquent boys did. Similarly, Bandura and Walters (1959) found that there was no difference in the extent that boys with a history of aggressive, antisocial behavior and normal boys with no history of psychiatric or behavior problems identified with their mothers (as determined by statements from the boys), but there was a difference in the extent of identification with their fathers: the aggressive, antisocial group identified significantly less with their fathers than did the control group. Thus, these authors found that the aggressive boys displayed as much warmth and as little hostility toward their mothers as did the control group, but more hostility and less warmth to their fathers than did the controls. Furthermore, the fathers of the aggressive boys were found to have had little positive interaction with their sons, and were more hostile,

rejecting, punitive, and lacking in warmth for their sons than were the control fathers. There was also some evidence that the little or partial identification that the aggressive boys made with their fathers was with the aggressive aspects of his personality, since these fathers, with their frequent use of physical punishment, provided readily observable aggressive models for their sons to imitate, thus possibly enhancing the incidence of aggressive behavior.

The studies cited by Glueck and Glueck (1950) and Bandura and Walters (1959) suggest that the failure to adequately identify with the father is an important antecedent and/or concomitant of aggressiveness. In a cross-cultural study designed to test the assumption that the lack of masculine identification is an antecedent of aggressiveness, Bacon, Child and Barry (1963) reasoned that since father availability is an essential condition for a boy to achieve a masculine identification, those societies in which there is little or no contact with the father in the early years should have a higher rate of crime than in those in which there is more father availability. Confirming their expectations, they discovered an inverse relationship between father availability and crime, i.e. as the opportunity for contact with the father decreased, the incidence of theft and personal crime increased. They also suggest that the compulsive masculine behavior so often seen in a male who has a history of anti-social behavior is a defense against his feminine identifi-

cation, and thus, an attempted assertion of masculinity. That this is not an isolated viewpoint can be seen in the following statement by Schilder (1936): "the ideology of identification of femininity and passivity is particularly outspoken in men who develop all kinds of aggressiveness in order to protest against their femininity (p. 608)." Miller (1958) also indicated that many lower class males show an obsessive concern for masculinity that is a result of residing in a predominantly feminine household without a consistently present male with whom he can identify. The antisocial behavior of these boys, Miller argues, can then be seen as an attempt to prove that they are masculine. Rosenfeld (1969) utilizes the same explanation in accounting for delinquent behavior.

MacDonald (1938) studied boys who never had an early satisfactory relationship with their fathers or father surrogates. In contrast to Bandura and Walters (1959) and Glueck and Glueck (1950) who found that the fathers were often punitive, these fathers were not. They were described as depressed, submissive, and uninterested in their children's lives. The mothers and mother surrogates were found to be aggressive, dominant, rejecting, punitive women. Though the description of the mothers sounds like that of the fathers in Bandura and Walters' (1959) study, these boys still made a feminine identification. When these boys were allowed to act out a feminine role, no antisocial behavior occurred, but

when forced to assume a masculine role with other boys, they responded with unprovoked physical attacks.

Bach and Bremer (1947) studied the father fantasies of a group of habitually delinquent, preadolescent children (boys and girls) with rejecting fathers, and compared them to the father fantasies of a non-delinquent group of children with average fathers. Using a projective doll play technique, they found that the number of fantasies involving the father doll produced by the deviant group was significantly less than the number produced by the control group. Also, the deviant group characterized their fathers as lacking in affection and empathy in the fantasies that they produced.

It is quite clear that in the studies cited, the aggressive, antisocial boys had inappropriate and inadequate masculine role models that prevented the boys from identifying with the models. The data are consistent with Heilbrun (1962) who found that identification with the father is related to good social adjustment among males and also the finding (Heilbrun, 1965a) that stronger father identifications are associated with more masculine sex-role behavior of the son and better adjustment.

While studies do indicate that antisocial adolescents identify less with their fathers than do normals, it is important to note that these studies have not measured the sex-role development of the adolescents. In a study which points out the limitations of the studies that deal only with identification, Rychlak and Legerski (1967), on the

basis of their results, do not agree that an identification with the opposite-sex parent leads to a personality disturbance or maladjustment. They found that personal maladjustment resulted only when a cross-sexed parental identification failed to prepare the child for the masculine or feminine role. Thus, they noted that only when males identified with a retiring-passive mother, as opposed to an identification with an ascendent-dominant mother, was maladjustment likely to result. They argued that as long as the son sees in his mother the characteristics which one day he is to assume, successful adjustment is probable. Maladjustment was most likely to result when the boy rejected both his father and an ascendent-dominant mother. Thus, the implication of this study is that a boy can identify with his mother and still have a masculine sex-role orientation and preference.

Besides the serious limitation of not studying the anti-social adolescents personality traits directly, the studies deal almost exclusively with delinquents who have been adjudicated and fail to deal both with those adolescents who may manifest similar behavior but are referred instead to an outpatient clinic for psychological services and those that exhibit different types of psychopathology. Also, while the parental traits of the delinquents are described, there has been no systematic attempt to study the sex-role development of these parents nor are there any studies of the sex-role development of the parents of other psychiatrically dis-

turbed adolescents. One purpose of this study is to examine these variables and their relationship to psychopathology in a systematic manner.

Also, it is conceivable that the problem that many of these adolescents have lies not in what traits they possess, but in societal expectations of what traits they should have. Thus, societal expectations have traditionally been that the male be aggressive, competitive and independent, and the female be passive and dependent, and deviations from these norms met with disapproval. By studying what sex-linked personality characteristics the parents would ideally like their sons to have, an attempt will be made to determine what traits these adolescents are expected to display.

Perception of Parental Sex-Role Behavior

The importance of both parents fulfilling their prescribed sex roles in relation to adequate personality functioning in their children has been noted by many writers. Biller (1971) stressed that adequate personality functioning is enhanced when the father and mother clearly represent the masculine and feminine roles. Lidz (1963) stated that "The maintenance of the appropriate sexual roles by parents in their coalition plays a major role in guiding the child's development as a male or female (p. 67)." He also states that a workable coalition between parents is dependent upon their assuming the culturally prescribed gender-linked roles. Though it has been his experience that some

parents can maintain a coalition while fulfilling deviant roles, the child's development will invariably be detrimentally affected. That the father seems not to function as an adequate role model and, therefore, not an identification figure, is a finding associated with the anti-social boy, but also with other types of psychopathology.

Garmezy, Clark, and Stockner (1961) measured the behavior of the parents of male schizophrenics. They found that the child's perception of his parents was a more important variable than the intra-familial dynamics that were reported by parents or observers. Generally, all of the following studies indicate that, especially for schizophrenics, the perception of the parents is consistent with and indicative of psychosexual role confusion.

Piety (1966) studied inpatient male paranoid and "other type" schizophrenics, alcoholics, neurotics, and normals, and their perception of their parents. He found that the poorly adjusted persons displayed more "perceptual dissonance", i.e. incongruity and confusion in his perceptions of the roles he is to assume, than normals. Piety argued that one antecedent to perceptual dissonance is the presence of conflicting values and tension between one's parents. He also found that "these dissonant perceptions are associated with pronounced tendencies for persons with functional disorders to reveal maternal identification and overprotection from their mothers and to have negative perceptions of the

fathers (p. 13)." In a later study, Piety (1967) found that male paranoid and chronic undifferentiated schizophrenics as well as alcoholics, but not neurotics, differed from normals in their global perception of their parents, having negative perceptions of the like-sexed parent, and expressing a preference for and closeness to the opposite-sexed parent.

Johnson and Meadow (1966) studied male reactive and process schizophrenics, and normals. They found that the schizophrenic groups identified significantly less with their fathers than did the normal group. They also perceived themselves to be less similar and also showed less desire to be like their fathers than did the normals. They interpret these findings to mean that schizophrenics are deficient in male identification models and have a weak sense of masculine adequacy.

Kayton and Biller (1971) compared the perceptions of parental sex-role behavior of normal, neurotic, paranoid and non-paranoid schizophrenics (males). These authors found that the normals perceived their parents exhibiting sex-appropriate behaviors to a greater extent than the disturbed groups. In interpreting their findings, they placed particular emphasis on the perception of the father as being autonomous, and noted that the father did not function as an adequate role model. Furthermore, the normal and neurotic groups perceived their mothers as representing a clear,

feminine role, but the schizophrenics did not. Thus, they called attention to the importance of both parents in clearly representing their sex-roles.

As mentioned in the last section, not all researchers agree that an identification with the opposite-sex parent leads to a personality disturbance (Rychlak and Legerski, 1967). These investigators found that maladjustment was likely when the boy rejected both his father and an ascendent-dominant mother and identified with a retiring-passive mother, but not likely to result when the boy identified with an ascendent-dominant mother.

The present study, by measuring the parents' sex-role development and also the adolescents' perception of parental sex-role behavior, will attempt to determine whether the problem for disturbed adolescents is that their parents do report a deviant sex-role development or whether the problem is that adolescents distort their perception of their parents' sex-role behavior.

Conceptualizations of Sex-Role

Within the last fifteen years, many investigators have been concerned with specifying more distinctly the term sex-role. Before this time, references to sex-role did not differentiate between those different aspects which many current investigators now believe make up the total complex known as sex-role.

Biller (1971) differentiates sex-role into three aspects.

The first aspect in his schema is sex-role orientation, which is the individual's unconscious perception of his maleness or femaleness and is a result of early learning experiences. The second is sex-role preference, which "refers to an individual's relative desire to adhere to the cultural prescriptions and proscriptions of the masculine and/or feminine role (p. 8-9)" and related to his attitudes and interests. Lastly, there is sex-role adoption, which refers to his overt behavior and to how others view it. Though a consistency is expected and found among many individuals, these aspects can be mutually exclusive.

Similarly, what Kagan (1964) refers to as sex-role identity is almost identical to what Biller conceptualizes as sex-role orientation. In addition, Kagan further distinguished between sex-role identity and sex-role standard, the latter term referring to the culturally prescribed characteristics for both the masculine and feminine roles and is related to Biller's sex-role preference.

Mentioned earlier is McClelland and Watt's (1968) expansion of Burton and Whiting's (1961) two levels of cross-sex identity. Reviewing briefly, they conceptualized three levels: gender identity which corresponds to Biller's sex-role orientation and Kagan's sex-role identity; sex-role style which refers to assertiveness in men and yielding in women and roughly corresponds to Biller's sex-role adoption; and sex-typed likes, interests, and attitudes, similar to Biller's sex-role preference and Kagan's sex-role standard.

In this study, sex-role development was conceptualized according to Biller's (1971) formulation.

STATEMENT OF THE PROBLEM

The literature surveyed indicates a positive relationship between disturbances in sex-role development and degree of psychopathology. However, much of the literature deals with adult schizophrenics, which results in several limitations. The first is that it remains unclear as to whether schizophrenics displaying traditional feminine traits are more pathological or are they judged as such by traditionally oriented diagnosticians because they display such feminine traits. Secondly, generalization of results is limited due to the usual practice of utilizing adult schizophrenics as the research sample, neglecting adolescents, children, and even those adults displaying other forms of psychopathology.

The literature on sex-role identity in adolescents provides limited data since it deals with delinquents in legal settings. The studies reviewed do not deal with the many adolescents who exhibit antisocial behavior and are referred to outpatient clinics and also with those adolescents who display other forms of psychopathology. These studies also have not studied the degree of severity of psychopathology and its relationship to sex-role develop-

ment in adolescents. Those studies that are concerned with identification with the same sex parent are generally limited in that they do not directly measure sex-role development. Instead, they assume that lack of closeness between the boy and his father indicates the absence of a masculine sex-role development.

Another serious limitation of previous studies is that they are generally concerned with just the relationship between sex-role development and psychopathology and do not examine other variables that may influence and/or account for this relationship. This study was designed to examine sex-role development and psychopathology and such important variables as the parents' sex-role development, the adolescents' perceptions of parental sex-role behavior, and the parents' expectations of the sex-linked personality characteristics that their sons should possess.

Hypotheses

This study first attempted to determine if there is a relationship between adolescent psychopathology and a disturbance in sex-role development. Due to the finding that a positive relationship exists between psychopathology and disturbances in sex-role development in adults (Kayton and Biller, 1971), and that delinquents exhibited greater unconscious femininity than normal boys (Rosenfeld, 1969), it was hypothesized that:

1. Antisocial adolescents are more disturbed in their

sex-role orientation than normals.

2. The mixed, non-antisocial psychiatric group are more disturbed in their sex-role orientation than normals.

The relationship between severity of adolescent psychopathology and sex-role development was also explored. Longitudinal research provides evidence that antisocial behavior, particularly when the severity is considered, is the single most powerful predictor of later adjustment problems of any childhood behavior thus far studied (Kohlberg et al., 1972). Robins (1966), in an extremely comprehensive study, discovered that antisocial children were found as adults to be more often sociopathic, alcoholic, or psychotic than were the controls or children referred for "other reasons", and they were also less likely to be neurotic. In addition, she found that non-antisocial symptoms added nothing to the prediction of later adult adjustment in the controls and children referred for other reasons. Also, antisocial children as adults had the highest rates of impoverishment, social alienation, hospitalization and subjective feelings of poor health; those referred for other reasons were intermediate between the antisocial children and the controls. In summarizing the available literature, Kohlberg et al., (1972), concludes that "childhood severe antisocial behavior is a necessary condition for the prediction of severe adult antisocial behavior, and milder forms of antisocial behavior are relatively good predictors

of all forms of adult maladjustment (p. 1253)." Furthermore, the evidence also suggests that the predictive power of antisocial behavior is not dependent on specific types of antisocial behavior, nor upon particular kinds of aggressive, sexual, or other motives. Thus, on the assumption that adolescents displaying antisocial behavior are more disturbed than those displaying any other childhood behavior, it was hypothesized that:

3. Antisocial adolescents are more disturbed in their sex-role orientation than the mixed, non-antisocial psychiatric group.

While it was expected that antisocial adolescents show greater sex-role orientation problems in that they have a greater unconscious feminine identification than the other groups, there are studies that suggest that antisocial adolescents defend against their unconscious feminine identification by displaying a form of compulsive, exaggerated masculine behavior (e.g. Miller, 1958). Also, since Rosenfeld (1969) found that the conscious masculinity displayed by delinquents was greater than non-delinquents, it was hypothesized that:

4. Antisocial adolescents display a greater degree of conscious masculinity than normals.
5. Antisocial adolescents display a greater degree of conscious masculinity than the mixed, non-antisocial psychiatric group.
6. The mixed, non-antisocial psychiatric group display a greater degree of conscious masculinity than the normals.

In addition to studying whether a relationship exists

between adolescent psychopathology and disturbances in sex-role development, this study also investigated some variables that may influence or account for this relationship. The first variable studied was the parents' sex-role development. Parents are considered to be the basic sex-role models for whom the child, through identification and imitation, comes to learn and develop his own sex-role identity. If, for example, the father is an inadequate model, then a disturbance in the sex-role development and personality functioning of the son could theoretically result. MacDonalds' (1938) study indicated that the sex-role behaviors manifested by the parents of the boys he studied were inappropriate and reversed from the culturally prescribed behaviors. Thus, it was hypothesized that:

7. The parents of antisocial adolescents are more disturbed in their sex-role orientation than parents of normals.

8. The parents of antisocial adolescents are more disturbed in their sex-role orientation than the parents of the mixed, non-antisocial psychiatric group.

9. The parents of the mixed, non-antisocial psychiatric group are more disturbed in their sex-role orientation than the parents of normals.

Furthermore, it was hypothesized that:

10. The parents of antisocial adolescents are more disturbed in their sex-role preference than parents of normals.

11. The parents of antisocial adolescents are more disturbed in their sex-role preference than the parents of the mixed, non-antisocial psychiatric group.

12. The parents of the mixed, non-antisocial psychi-

atric group are more disturbed in their sex-role preference than the parents of the normals.

Integrally related to the parents' sex-role development is the adolescents' perception of parental sex-role behavior. The few studies which link psychopathology and the perception of parental sex-role behavior seem to point to a relationship between the degree of psychopathology and the perception of parental sex-inappropriate behavior (e.g. Kayton and Biller, 1972). Drawing upon the fact that antisocial behavior in children was the single most powerful predictor of later maladjustment of all childhood behavior thus far studied (Kohlberg et al., 1972), and the many studies emphasizing the inadequacy of the father to function as a role model for his son (e.g. Bandura and Walters, 1959), it was hypothesized that:

13. Antisocial adolescents perceive greater sex-role inappropriateness in their parents than do normals.
14. Antisocial adolescents perceive greater sex-role inappropriateness in their parents than do the mixed, non-antisocial psychiatric group.
15. The mixed, non-antisocial psychiatric group perceive greater sex-role inappropriateness in their parents than do the normals.

Also, the expectations that parents have for their sons were examined. It is conceivable that the problem confronting and/or adding to the difficulty of these disturbed adolescents is not that they possess traits not considered to be traditionally masculine, but that parental expectations run counter to the traits they display, thus

leading to conflict and possible problems in the adolescent. Due to the absence of research in this area, no hypotheses were offered. The expectations that the parents have is especially important for those who believe that it is not the behaviors that the child shows that causes the difficulty, but that the difficulty is due to societal expectations of the behaviors he is supposed to show or traits he is expected to possess.

Finally, as an attempt to relate each of these variables to a particular category of psychopathology, this study attempted to determine the extent to which each of these variables adds to the likelihood of an adolescent being included in a particular category of psychopathology.

METHODOLOGY

Subjects

There were three groups each with 17 males between the ages of 13 and 20. The two psychiatric groups were drawn from outpatient clinics in Rhode Island and Southern Massachusetts. The normal control group was drawn from public high schools in Rhode Island and psychology classes at the University of Rhode Island.

The aggressive, antisocial group was defined, with one exception, in the same manner as in Robins' study (1966). Boys were considered aggressive and exhibiting antisocial behavior if the reason for referral or the major complaints included one of the following: theft, burglary, robbery, forgery, truancy, chronic tardiness at school, running away, sexual perversion, public masturbation, excess heterosexual interest or activity, vandalism, false fire alarms, carrying deadly weapons, incorrigibility, refusal to work, lying, keeping late hours, fighting or physical cruelty. An addition to this group were youths who were referred to a drug clinic for the use of drugs. The clinic which these youths attended was under the realm of a law enforcement agency. Since the use of drugs can

be considered a manifestation of acting-out tendencies or symptomatic of a deeper, underlying psychiatric problem, inclusion in the antisocial group was made when the psychologist and director of the clinic felt that the use of drugs was a manifestation of acting-out tendencies or a rebellion directed against society.

In this group, then, were: drugs-narcotics, 5, alcohol, 1; theft, 4; incorrigibility, 3; sexual perversion, 2; truancy, 1; fighting, 1. The mean age and IQ of this group was 15.6 years and 106.3. The parents of these boys had mean scores of 4.3 and 5.6 on indexes of education and occupation on Broverman's (1961) adaptation of Hollingshead's (1957) index of social position. These scores indicate that the fathers of these boys were, as an average, high school graduates and were clerical and sales workers, technicians, and owners of small businesses.

The mixed psychiatric group was also defined after Robins (1966). This group included those referred for or having as one of the major complaints one of the following: temper tantrums, irritability, depression, anxiety, fears, school failures, inattention or daydreaming, enuresis, speech defects, tics, odd food preferences or habits, nightmares and restlessness. In this group were: school failures, 5; depression, 4; fears, 3; daydreaming, 1; temper tantrums, 1; anxiety, 1; enuresis, 1; tics, 1. The mean age and IQ for this group was 15.2 years and 98.3. The parents had mean scores of 4.1 and 5.1 on education and occupation indexes, indicating that the fathers of these

boys had similar educations and were engaged in similar occupations as the fathers of the antisocial adolescents.

The boys in the control group were selected if there was no history of prior behavioral and/or emotional difficulties. The mean age and IQ for this group was 15.9 years and 114.8. Parents had mean scores of 2.7 and 3.1 on indexes of education and occupation. These scores indicate that the fathers of these boys had, as an average, a college degree and were generally administrative personnel, owners of small independent businesses, and minor professionals.

Since there is no strong relationship between IQ and adjustment (Kohlberg et al., 1972), the subjects were not matched for IQ. The subjects were to be matched for age and socioeconomic status, but due to the difficulty in obtaining subjects, it was not possible to match them on these variables. Since socioeconomic class could not be controlled through sampling procedures and to eliminate the effects of differences in IQ, the effects were controlled by a statistical procedure. Those who were psychotic or grossly neurologically impaired were eliminated. All subjects came from intact homes (residing with natural mother and father), and were volunteers. Although some of the adolescents were known to agencies for some time, no subject had more than 12 counseling or therapy sessions.

Measures

Franck Drawing Completion Test

The Franck Drawing Completion Test (FDCT) developed by

Franck and Rosen (1949), is a projective measure designed to tap unconscious sex-role identity. The test consists of 36 incomplete drawings which the subject is asked to complete or elaborate in any way he chooses. The drawings extend over approximately one square inch and are located in the center of a cell $2\frac{1}{4}$ inch square. There are 12 drawings to a page. Scoring is in terms of both style and content of drawings and is straightforward: each item is scored either masculine ("-") or feminine ("+"). The individual's total score consists of the number of feminine scores, thus the range being from 0 to 36. The authors feel that any trained clinician who has familiarity with projective tests can become efficient in the scoring of the Franck Drawing Completion Test with little difficulty. Cultural factors are not considered to be major determinants of the observed responses.

Using a psychoanalytic basis as a point of departure, Franck and Rosen (1949) presented 60 stimuli to a group of 250 introductory psychology students. Differences in how the 60 items were completed by men and women were examined. They found that 36 of the 60 items yielded statistically significant differences in how they were completed. The norms are based on this sample.

The only reliability data that Franck and Rosen (1949) report are the inter-rater reliability when they administered the Franck Drawing Completion Test to a new group of 150

male and 150 female students. The correlation between scores (the authors plus an associate who was familiar with projective techniques but not the FDCT) ranged from $+ .84$ to $+ .90$ with very small differences between them. However, an indication of its validity from this study is that the Franck Drawing Completion Test did differentiate between the two groups. Rosenfeld's (1969) results with the Franck Drawing Completion Test are consistent with what the theoretical literature would predict, and is, therefore, an indication of its construct validity. Though the Franck Drawing Completion Test has been used extensively, many of the studies utilizing it are unpublished (Annestasi, 1971). Exceptions are Biller and Barry (1971) and Miller and Swanson (1960).

The Franck Drawing Completion Test has been reported not to correlate with tests that are designed to tap conscious identity, e.g. The Terman-Miles Interest Analysis Test, the Masculinity-Femininity Scale of the Strong Vocational Interest Blank, and the Masculinity-Femininity Scale of the Minnesota Multiphasic Personality Inventory (Miller and Swanson, 1960).

The Femininity Scale of the California Psychological Inventory

This scale consists of 38 true-false questions designed "to assess the masculinity or femininity of interests

(Gough, 1957, p. 13)." The 38 items represents a revision of the original 58 item scale, which was found to highly differentiate between males and females on cross-validation studies. Gough (1966) reports that the correlation between the two scales is typically $+0.95$ or better. High scores on this scale indicate more feminine interests and low scores more masculine.

Only two reliability studies are reported by Gough (1957) in the California Psychological Inventory manual. Both reliability studies used the test-retest method. In the first study, two high school junior classes took the CPI in the fall and then one year later. A test-retest reliability coefficient of $+0.65$ was obtained for the females ($N=125$) and a coefficient of $+0.59$ for males ($N=101$). In the second study, 200 male prisoners took the test twice, with an interval of 7 to 21 days; a test-retest reliability coefficient of $+0.73$ was obtained. Gough's explanation for the modest correlations found among the high school subjects was that it was due in part to the differing rates of maturation between high school students of this age, which appears rather tenuous as an explanation.

In considering validity, the Femininity scale fares better. The Femininity scale was found to differentiate between males and females in high school, college, and psychology graduate populations. For example, Gough (1957) found that 4,056 high school females had a mean score 24.13,

while 3,572 high school males had a mean score of 15.63. A point-biserial correlation for the above data is +.78. Using 152 adult males as the research sample, the Femininity scale was found to correlate -.41 with the masculinity scale of the Strong Vocational Interest Blank, and +.43 with the Masculinity-Femininity scales of the MMPI.

Justification for the use of the Femininity scale as independent from the rest of the scales seems to be warranted on the basis of the following data that indicates that discriminant validity exists. Gough (1957) presents the intercorrelation matrix for males, which contained the unweighted mean coefficients from five individual matrices, consisting of 4,098 cases. Similarly, the intercorrelation matrix for females contained the same number of individual matrices as the males, differing in that there was a total of 5,083 cases. Samples utilized for the males were: high school and college students, military officers, prison inmates. For the females: high school and college students, and prison inmates. Coefficients ranging from -.30 to +.21 and from -.26 to +.19 were obtained for the males and females respectively. The coefficients are low and appear not to be significant. Since the Femininity scale has only a small amount of variance in common with the other scales, the Femininity scale appears to be measuring an independent trait.

Norms for the CPI are based on the combined data from all research samples into a single composite for each sex. Thus, the norms are based on subjects from a number of geo-

graphical areas, socioeconomic groups, and age ranges. Furthermore, mean profiles are available for high school populations.

The Adjective Check List

The Adjective Check List, developed by Gough and Heilbrun (1965), consists of a 300 word adjective check list in which the individual is instructed to check those adjectives which characterize his behavior. There are 25 scales: 4 test validity scales, 5 personality adjustment scales, a masculinity-femininity scale (Heilbrun, 1964a) and 15 need scales. Each of the latter scales represents a disposition from Murray's need-press system. One of the need scales measures heterosexual orientation.

Nine of the need scales were found by Heilbrun to be sex-typed and were originally to be used for the Heilbrun Parental Description Survey (Heilbrun, 1964c). This was found by having 200 male and 200 female undergraduates describe their parents in terms of the 15 need scale traits. Heilbrun found that for nine of them, one parent or the other was predominantly selected as being better characterized. Four of the traits, achievement, autonomy, dominance, and endurance, were perceived as more masculine and the deference, affiliation, succorance, abasement, and nurturance traits as more feminine. The masculinity-femininity scale (1964a), the last of the scales to be developed, consist of those adjectives in the ACL that were found to reliably dis-

criminate between college males and females.

Reliability studies (test-retest) that are reported in the manual were carried out on only four small samples (Gough and Heilbrun, 1965). Reliability coefficients for the 56 college males and 23 college females tested 10 weeks apart ranged from +.46 to +.90 (for the 9 sex-typed scales and heterosexual orientation: +.54 to +.85), and +.45 to +.90 (for the 9 sex-typed scales and heterosexual orientation: +.45 to +.84) respectively. Reliability coefficients for the 100 adult males tested six months apart and the 34 medical students tested 5½ years apart ranged from +.31 to +.75 (for the 9 sex-typed scales and heterosexual orientation: +.33 to +.72) and +.25 to +.77 (for the 9 sex-typed scales and heterosexual orientation: +.25 to +.65) respectively. It is obvious that some of the scales lack adequate reliability and will, therefore, be interpreted with caution. In general, however, most of the scales have adequate reliability.

Validity studies have been conducted mostly with the need scales. Since the need scale traits on the Adjective Check List correspond directly to those on the Edwards Personal Preference Schedule, correlations between each ACL scale and its counterpart were determined. Ten of the 15 coefficients were significant at or beyond the .01 level. In addition, of the scales of special interest for this

study, the correlations for the achievement, endurance, and heterosexual orientation scales do not reach significance. The achievement scale, in another study (Heilbrun, 1959) did correlate with a non-test criterion.

The masculinity-femininity scale of the ACL seems to have garnered the most convincing validity data, as a number of studies have indicated that it does have construct validity. These studies have found that the relationship between the masculinity-femininity scale and sex-role development and personality adjustment are consistent with theory and prior empirical findings (Heilbrun, 1964a; 1964c; 1965b; Heilbrun and Fromme, 1965). For example, it has been shown that aggression anxiety is a feminine sex-linked attribute among 12 year old children (Sears, 1961). Cosentino and Heilbrun (1964) found that the relationship between aggression anxiety and sex-role identity is the same at 20 years as it is at 12 years, i.e. greater femininity at each level is associated with greater aggression anxiety for both males and females.

The correlations (based on samples of males) of the nine sex-typed need scales and the heterosexuality scale with the Femininity scales of the CPI are low with only the abasement scale showing a significant though low correlation. The same scales are also found to have low and non-significant correlations (with the exception of the heterosexuality scale) with the masculinity-femininity scale of the MMPI

(Gough and Heilbrun, 1965). It should be noted, though, that the Femininity scale and the MMPI measure sex-role interest, while the ACL measures personality traits; thus, one would expect the correlations between them to be low. Lastly, the inter-correlations among the scales are low enough that one can assume that the scales are, for the most part, measuring independent traits, thus further justifying the use of only some of the scales.

Heilbrun's Parental Description Survey

This survey is a rating form which contains short descriptions of the 15 personality need variables measured by the ACL. The descriptive statements were taken from the Edwards Personal Preference Schedule. The subject is instructed to simply indicate which descriptions typify his mother or father (Heilbrun, 1965b).

This survey has been widely used in conjunction with the ACL as a means of studying identification (Heilbrun, 1962, 1964b, 1964d, 1965b, 1965c). When used together, it is known as the Identification scale. This is accomplished by comparing the degree of perceived similarity between the parental choices and one's self ratings for each scale (Heilbrun, 1965b).

The construct validity of the Identification scale seems to be well established, with the relationships between the identification measure and a number of variables (e.g. adjustment, paternal nurturance, sex-identity of the child)

being consistent with theory and previous empirical research (Heilbrun, 1965b).

The PDS, however, is an independent measure and has been used separately to measure the perception of parental traits (Heilbrun, 1964b, 1964c, 1965b, 1965c). Of the 15 need traits on the PDS, it was mentioned previously that on an empirical basis, nine of the need scale traits were found to be sex-typed (Heilbrun, 1964c). By scoring one point each time the father was depicted by the masculine trait and one point each time the mother was depicted by the feminine trait, one can determine the child's perception of either sex-role appropriate or inappropriate behavior on the part of the parents (Heilbrun, 1964c).

Heilbrun (1965b) points out that there are limitations to this survey. For example, it is not an absolute measure of parental characteristics, but since the parents are compared to each other on the traits, it is a relative measure. Also, there is a lack of a differential weighting system for each parent. Though there are limitations, Heilbrun feels that they are outweighed by the reliable ratings, the fact that the ratings are based on observed experiences of parental interaction and the validity of the instrument, though it appears that the validity that he refers to is the construct validity of the Identification scale.

Procedure

The subjects were told by the author that he is conducting a study that will provide some information as to the interests of boys referred to a clinic and also the interests of their parents, and that the information may be helpful in the treatment of their children. The normal controls and their parents were told that the author is conducting a study in which he is investigating variables that may indicate why certain adolescents are referred to outpatient clinics and why certain adolescents are not. The standard instructions for the ACL were utilized for the self-descriptions. A second administration was given to the parents and they were told to check those adjectives that they would ideally like to describe their son. The standard instructions for the FDCT and the Femininity scale were read to the subjects. On the PDS, the adolescents were told to indicate which descriptions typify his mother or father. Each subject was tested individually and the order of presentation of tasks randomized.

RESULTS

Psychosocial Data

It was important that the groups be matched for age, occupation and education level of the parents, and to a lesser extent, IQ. Due to the difficulty in obtaining subjects, it was not possible to match subjects on these variables. Analyses of variance revealed that there were differences between the groups on parents occupation ($F=9.19, p<.001$), and education ($F=9.09, p<.001$), and adolescents IQ ($F=6.18, p<.004$), but not on their age ($F=.68, p>.05$). The effect of education, occupation, and IQ were statistically controlled in future comparisons between the three groups of adolescents by using analyses of covariance. Since there was no IQ data on the parents, the effects of education and occupation were statistically controlled in comparisons between the three groups of mothers and between the three groups of fathers.

Dunnett's t statistic (Winer, 1962) was employed to determine where the differences were on the psychosocial variables in which the groups differed. The analyses on occupation indicated that both the mixed and antisocial groups differed significantly from the normal group (See

Appendix A for t values). To determine whether there were any differences between the two psychiatric groups, an analysis of variance was run which showed that there were no differences ($F=2.68$, $p>.05$). The analyses on education revealed that both the mixed and antisocial groups differed significantly from the normal group. Since the means of the two psychiatric groups are similar, it is obvious that there are no differences between them. The analyses on IQ showed that only the mixed group differed significantly from the normal. An analysis of variance run on the two psychiatric groups indicated that there were no differences ($F=2.68$, $p>.05$).

Sex-Role Development

It was predicted that the antisocial adolescents would exhibit a more feminine sex-role orientation than the mixed group, and the latter would exhibit a more feminine sex-role orientation than the normals. Thus, it was expected that the antisocial adolescents would have more feminine completions on the Franck Drawing Completion Test than the mixed group, and the latter would have more than the normals. Also, it was predicted that the antisocial adolescents would display a greater conscious masculinity than the mixed adolescents, and the latter more than the normal adolescents. It was expected, then, that the antisocial adolescents would have a lower score than the mixed adolescents on the Femi-

ninity scale, and the mixed adolescents a lower score than the normal adolescents. Although the mean of the anti-social adolescents on the FDCT is the highest, an analysis of covariance failed to confirm the predictions ($F=.02$, $p>.05$). Similarly, an analysis of covariance indicated that there were no differences between the groups on the Femininity scale ($F=.28$, $p>.05$). Inter-judge reliability of the FDCT was high, with a Pearson-Product Moment correlation of .89 for all decisions on the FDCT.

Fathers of the antisocial adolescents were expected to have a more feminine sex-role orientation and thus have more feminine completions on the FDCT than the fathers of the mixed adolescents, and the latter more than the fathers of the normals. Also, it was predicted that the fathers of the antisocial adolescents would display a greater conscious masculinity and thus score lower on the Femininity scale than fathers of the mixed adolescents, and the latter would score intermediate between fathers of the antisocial and normal adolescents. Although the fathers of the antisocial adolescents had the highest mean on the FDCT, much like their sons did, an analysis of covariance failed to confirm the predictions ($F=1.67$, $p>.05$). A similar analysis failed to confirm the predictions regarding performance of the fathers on the Femininity scale ($F=.01$, $p>.05$).

Mothers of the antisocial adolescents were expected to have a more masculine sex-role orientation and thus have

more masculine completions on the FDCT than the mothers of the mixed adolescents, and the latter would have more than the mothers of the normal adolescents. It was also predicted that the mothers of the antisocial adolescents would display a greater conscious femininity and thus score higher than the mothers of the mixed adolescents; the latter would score higher than the mothers of the normal adolescents.

Although the mothers of the normal group had the highest mean on the FDCT, indicating more feminine completions than the other mothers, an analysis of covariance failed to support the predictions ($F=1.37$, $p>.05$). Similarly, although the mothers of the normals scored the lowest on the Femininity scale, statistical treatment of the data indicated no significant differences ($F=.38$, $p>.05$).

Perception of Parental Sex-Role Behavior

It was predicted that the antisocial adolescents would perceive greater sex-role inappropriateness in their parents than the mixed adolescents, and the latter would perceive greater sex-role inappropriateness in their parents than the normal adolescents. Thus, on the PDS the antisocial adolescents would perceive their fathers and mothers less masculine and feminine respectively than the mixed group and normals, with the mixed group intermediate between the antisocial adolescents and normals. The number of correct responses on each item for the three groups was tested for significance by Chi-Square. None of the differences reached

significance (Appendix B).

Personality Traits - Adolescents

The overall pattern of findings on the ACL did not come out as predicted. The antisocial adolescents were expected to score lower on the heterosexuality, achievement, dominance, endurance, and autonomy scales, and higher on the nurturance, affiliation, succorance, abasement, masculinity-femininity and deference scales of the ACL than the normals. The mixed adolescents were expected to be intermediate between the antisocial and normal adolescents. Analyses of covariance revealed no significant differences between the groups on the masculinity-femininity, heterosexuality, achievement, autonomy, affiliation, succorance, abasement, and deference scales (see Appendix C for F values).

While the three groups were not differentiated on the overall configuration on the ACL, it is quite important to note that there were consistent significant differences on three of the personality traits: dominance, endurance, and nurturance. As will be seen later, when the results of the mothers and fathers are discussed, the fact that the adolescents differed on the dominance and endurance scales has special significance. It is also worthy to note that the normal adolescents scored highest on the achievement scale, and lowest on the succorance, abasement, deference, and masculinity-femininity scales.

Dunnett's t statistic was employed to determine if

differences existed between the two psychiatric groups and the normal group on the dominance, endurance, and nurturance scales. On the dominance scale, the analyses showed that the mixed and normal groups differed ($t=3.01$, $p<.005$), with the normal group scoring higher, but that the antisocial group did not differ from the normal ($t=1.01$, $p>.05$). Since there were no significant differences between the two psychiatric groups on any of the psychosocial variables, an analysis of variance run on those two groups showed that there were no differences in their scores on the dominance scale ($F=3.13$, $p>.05$).

On the endurance scale, the analyses indicated that both the mixed ($t=3.28$, $p<.005$) and the antisocial ($t=2.76$, $p<.01$) groups differed significantly from the normal group, with the latter having the highest score. There were no differences between the two psychiatric groups ($F=.59$, $p>.05$).

On the nurturance scale, it was found that the mixed group differed significantly from the normal group ($t=3.09$, $p<.005$) with the latter having a higher score. Since the means for the antisocial and normal group are virtually similar, it is obvious that these two groups did not differ. An analysis of variance revealed that there were differences between the mixed and antisocial group ($F=5.49$, $p<.02$), with the latter group having the higher score.

Personality Traits - Fathers

The fathers of the antisocial adolescents were expected

to score lower on the heterosexuality, achievement, dominance, endurance, and autonomy scales, and higher on the nurturance, affiliation, abasement, succorance, masculinity-femininity, and deference scales than the fathers of the mixed group and normals, with the former intermediate between the antisocial and normal adolescents. Analyses of covariance failed to support any of the predictions (see Appendix C for F values). It is interesting to note that the fathers of the normal adolescents scored highest on the achievement, dominance, endurance, and heterosexuality scales, and lowest on the succorance, abasement, and masculinity-femininity scales as expected.

The personality traits the fathers would ideally like their male offspring to have were examined. No predictions were made. Analyses of covariance revealed no differences between the fathers' expectations on autonomy, nurturance, affiliation, succorance, abasement, deference, heterosexuality, and masculinity-femininity traits in their sons. It is significant, however, that the fathers did differ in their expectations for their sons on dominance, endurance, and achievement. It will be recalled that the three groups of adolescents differed on dominance and endurance.

Dunnett's *t* statistic was utilized in order to determine if there were differences between the fathers of the psychiatric groups and normals on achievement, dominance, and endurance. The analyses indicated that on achievement, both

the fathers of the antisocial ($t=3.58$, $p<.005$) and mixed ($t=2.49$, $p<.025$) adolescents differed from the fathers of the normals in regard to how achieving they desired their sons to be, with the fathers of the latter desiring their sons to be more achieving. To determine if there were any differences between the fathers of the psychiatric groups, an analysis of variance was run which indicated that there were none ($F=1.56$, $p>.05$).

On dominance, the analyses revealed that both the fathers of the antisocial ($t=3.42$, $p<.005$) and mixed ($t=2.00$, $p<.05$) adolescents differed from the fathers of the normals in regard to how dominant they expected their sons to be, with the fathers of the normals expecting their sons to be more dominant. There were no differences between the fathers of the two psychiatric groups ($F=2.44$, $p>.05$).

The fathers of the antisocial adolescents were found to differ significantly from the fathers of the normals ($t=3.44$, $p<.005$) on endurance, with the normal fathers expecting their sons to be more enduring. The fathers of the mixed group did not differ from the fathers of the normals ($t=.98$, $p>.05$). The fathers of the adolescents in the two psychiatric groups were found to differ in their expectations of their sons on this trait ($F=9.14$, $p<.01$).

Personality Traits - Mothers

Mothers of the antisocial adolescents were expected to score lower on the masculinity-femininity, heterosexuality,

and feminine-typed scales (nurturance, affiliation, succorance, abasement, deference) and higher on the masculine-typed scales (achievement, dominance, endurance, autonomy) than the mothers of the mixed adolescents, with the latter mothers intermediate between the mothers of the antisocial and normal adolescents. No differences were found on the achievement, dominance, endurance, autonomy, nurturance, deference, and masculinity-femininity scales (see Appendix C for F values). It is interesting to note that the mothers of the normals had the highest means on achievement, dominance, endurance, autonomy and nurturance scales, and the lowest on the masculinity-femininity scale. None of the differences, however, reached significance.

Differences between the mothers were found on the affiliation, succorance, abasement, and heterosexuality scales. Dunnett's *t* statistic indicated that on the affiliation scale, the mothers of both the antisocial ($t=3.45$, $p<.005$) and mixed ($t=3.25$, $p<.005$) adolescents differed from the mothers of the normals, with the mothers of the normals scoring the highest. No differences were found between the mothers of the two psychiatric groups ($F=.001$, $p>.05$).

On succorance, differences were found between the mothers of the antisocial and normal adolescents ($t=2.53$, $p<.025$) and the mothers of the mixed and normal adolescents ($t=3.11$, $p<.005$), with the mothers of the normals having the lowest score in each case. No differences were found between the mothers of the mixed and antisocial adolescents ($F=.60$,

$p > .05$).

The analyses revealed that on abasement, both the mothers of the antisocial and mixed adolescents differed from the mothers of the normals ($t=2.71$, $p < .01$; $t=2.77$, $p < .01$ respectively). In each case, the mothers of the normals had the lowest score. The mothers of the adolescents of the two psychiatric groups were found not to differ ($F=.14$, $p > .05$).

Lastly, on the heterosexuality scale, only the mothers of the antisocial adolescents differed from the mothers of the normals ($t=3.08$, $p < .005$), with the latter having the higher score. Although there were no differences between the mothers of the mixed and normal adolescents ($t=1.82$, $p > .05$), the mothers of the mixed and antisocial adolescents did not differ ($F=.88$, $p > .05$).

The expectations of the personality traits these mothers had for their sons were examined. Like their spouses, these mothers differed in their expectations on achievement and dominance. It was found that on achievement, the mothers of the mixed adolescents differed from the mothers of the normals ($t=2.92$, $p < .01$), but not the mothers of the antisocial and normal adolescents ($t=.99$, $p > .05$). The mothers of the normals expected their sons to be more achieving than the mothers of the mixed adolescents. Although only the mothers of the mixed adolescents differed from the mothers of the normals, the mothers of the mixed and antisocial ado-

lescents did not differ from each other in their expectations for their sons on this variable ($F=2.36$, $p>.05$).

Both the mothers of the antisocial and mixed adolescents differed from the mothers of the normals on their expectations of endurance from their sons ($t=2.28$, $p<.05$; $t=3.25$, $p<.005$ respectively), with the mothers of the normals expecting their sons to be more enduring than the other mothers. No differences were found between the mothers of the antisocial and mixed adolescents ($F=.90$, $p>.05$).

Classification - Adolescents

Another question to be asked was whether some of the variables could be used to classify an adolescent used in this study into one of the three groups: normal, antisocial, or mixed. The following 14 variables were examined as predictor variables: achievement, dominance, endurance, autonomy, nurturance, affiliation, succorance, abasement, deference, heterosexuality, masculinity-femininity, Femininity Scale, Parental Description Survey, and the resolved scores on the Franck Drawing Completion Test.

A Multiple Discriminant Analysis was performed on the data. The discriminant equations and classification matrix are found in Tables 1 and 2 respectively. A Generalized Mahalanobis D-Square value of 55.57 was obtained. This value can be used as Chi-Square with 28 degrees of freedom. The analysis indicated that the mean values were not the same in all the 3 groups for these 14 variables, showing that a

TABLE 1
Discriminant Equations For The Adolescents

Variable	Function		
	1	2	3
Achievement	-4.49	-4.42	-4.61
Dominance	4.37	4.32	4.55
Endurance	2.57	2.65	2.49
Autonomy	9.72	9.71	9.75
Nurturance	3.40	3.62	3.58
Affiliation	-0.87	-1.03	-0.85
Succorance	2.45	2.45	2.65
Abasement	1.22	1.06	1.16
Deference	6.59	6.63	6.57
Heterosexuality	0.00	0.00	0.01
Masc.-Fem.	-1.83	-1.98	-1.93
Femininity Scale	-1.48	-1.29	-1.36
PDS	3.85	4.12	4.16
FDCT	2.10	2.01	1.99
Constant	-629.73	-632.95	-648.38

TABLE 2
Classification Matrix For The Adolescents

<u>Group</u>	<u>Function</u>			<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	
Mixed	12	2	3	17
Normal	3	12	2	17
Antisocial	3	4	10	17

clear separation was found for the 3 groups on the basis of the 14 variables. Mean values and the probability of each case belonging in a particular group can be found in Appendix D. An examination of the discriminant equations reveals that autonomy, deference, dominance, and the Parental Description Survey are the variables with the largest weights.

A Chi-Square performed on the observed frequencies in the classification matrix indicated that these frequencies differ from the frequencies which one would expect on the basis of chance ($X^2=25.94$, $p<.001$). Cramer's statistic (Hays, 1963) for the apparent strength of statistical association between the attributes showed that there is a considerable degree of dependence ($\phi=.50$).

In sum, the results show that the predictor set used can accurately classify the adolescents used in this study into one of three groups.

Classification - Fathers

Twenty-four variables were examined as predictor variables to determine if on the basis of their scores on these variables, the fathers of the three groups of adolescents could be classified in a manner consistent with their sons' placement. The variables were: achievement, dominance, autonomy, nurturance, affiliation, succorance, abasement, deference, heterosexuality, and masculinity-femininity of the self check; achievement, dominance, endurance, autonomy, nurturance, affiliation, succorance, abasement, deference,

heterosexuality, masculinity-femininity of the ideal check, and Femininity scale and the FDCT. A Multiple Discriminant Analysis was performed on the data, with the discriminant equations and classification matrix appearing in Tables 3 and 4 respectively. A Generalized Mahalanobis D-Square value of 123.71 was obtained. This value can be used as Chi-Square with 48 degrees of freedom and indicated that the mean values were not the same in all the three groups. Thus, a clear separation was found for the 3 groups on the basis of the 24 variables. Mean values and the probability of each case belonging in a particular group can be found in Appendix D.

Inspection of the discriminant equations reveals that dominance of the ideal check is by far the variable with the greatest weight, followed by succorance, autonomy, abasement, all of the ideal check. On visual inspection of the classification matrix, one can see that the three groups of fathers are separated accurately on the basis of their profiles. A Chi-Square performed on the observed frequencies, as expected, indicated that the frequencies obtained differ from the frequencies which one would expect on the basis of chance ($\chi^2=62.52$, $p<.001$). Cramer's statistic for the apparent strength of statistical association between the attributes showed that there is a considerable degree of dependence ($\phi^2=.78$). Thus, by use of the predictor variables specified above, one could accurately classify the fathers in

TABLE 3
Discriminant Equations For The Fathers

Variable	Function		
	1	2	3
Achievement-S	.80	.51	.87
Dominance-S	4.74	4.99	4.93
Endurance-S	-2.78	-2.81	-2.91
Autonomy-S	7.13	7.22	6.90
Nurturance-S	3.09	3.34	2.84
Affiliation-S	-4.24	-4.06	-3.75
Succorance-S	-0.71	-0.48	-0.36
Abasement-S	3.62	3.77	3.64
Deference-S	7.33	7.05	7.18
Heterosexuality-S	-1.87	-2.18	-2.23
Masc.-Fem.-S	4.64	4.49	4.57
Achievement-I	-7.10	-7.12	-7.43
Dominance-I	29.47	29.06	29.28
Endurance-I	-4.25	-4.12	-4.34
Autonomy-I	13.75	13.89	14.23
Nurturance-I	6.32	6.15	6.09
Affiliation-I	-3.56	-3.44	-3.59
Succorance-I	14.97	15.22	14.80
Abasement-I	12.79	12.53	12.93
Deference-I	8.59	8.80	9.08
Heterosexuality-I	-0.28	-0.18	-0.19
Masc.-Fem.-I	-10.67	-10.88	-10.83
Femininity Scale	4.05	4.06	4.05
FDCT	9.60	9.16	9.52
Constant	-2319.30	-2323.05	-2317.75

S = Self Check

I = Ideal Check

TABLE 4
Classification Matrix For The Fathers

<u>Group</u>	Function			<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	
Normal	14	3	0	17
Mixed	1	15	1	17
Antisocial	0	3	14	17

this study in a manner that was consistent with their sons' placement.

Classification - Mothers

The same predictor variables used with the fathers were used to determine whether the mothers of the three groups of adolescents could be classified in a manner consistent with their sons' placements. A Multiple Discriminant Analysis was performed on the data, with the discriminant equations and classification matrix being found in Tables 5 and 6 respectively. A Generalized Mahalanobis D-Square value of 159.48 was obtained. This value can be used as Chi-Square with 48 degrees of freedom and indicated that the mean values were not the same in all the 3 groups for these 24 variables. A clear separation was thus found for the 3 groups of mothers on the basis of the 24 variables. Mean values and the probability of case case belonging in a particular group can be found in Appendix D.

The resulting discriminant equations indicate that deference of the ideal check has the largest lambda weight, followed by the FDCT, autonomy of the ideal check, and autonomy and deference of the self check. As can be seen by inspection of the classification matrix, the mothers, on the basis of their profiles, are highly separated. As expected, Chi-Square analysis indicated that the frequencies obtained differ from the frequencies one would expect due to chance ($\chi^2=85.28$, $p<.001$). Cramer's statistic indicated a high de-

TABLE 5
Discriminant Equations For The Mothers

Variable	Function		
	1	2	3
Achievement-S	-3.01	-3.22	-2.95
Dominance-S	0.01	0.13	0.58
Endurance-S	2.61	2.77	2.18
Autonomy-S	10.80	10.89	11.47
Nurturance-S	4.89	4.43	5.07
Affiliation-S	-1.88	-1.89	-2.30
Succorance-S	8.78	8.74	8.79
Abasement-S	-1.24	-0.97	-0.99
Deference-S	10.69	10.66	11.59
Heterosexuality-S	-2.34	-2.11	-2.54
Masc.-Fem.S	-14.37	-14.60	-15.32
Achievement-I	1.77	0.86	1.45
Dominance-I	6.89	7.51	7.08
Endurance-I	2.59	2.42	2.34
Autonomy-I	12.91	12.63	12.17
Nurturance-I	3.96	4.00	4.18
Affiliation-I	-8.60	-8.00	-8.54
Succorance-I	8.09	7.75	7.38
Abasement-I	-3.71	-3.45	-3.40
Deference-I	18.30	17.54	17.53
Heterosexuality-I	0.91	0.72	0.83
Masc.-Fem.-I	-0.90	-0.41	-0.56
Femininity Scale	3.74	3.91	3.99
FDCT	13.41	13.60	13.31
Constant	-1995.67	-1946.62	-1977.08

S = Self Check

I = Ideal Check

TABLE 6
Classification Matrix For The Mothers

<u>Group</u>	<u>Function</u>			<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	
Normal	16	0	1	17
Mixed	0	16	1	17
Antisocial	0	1	16	17

gree of statistical association between the attributes ($\phi'=.91$).

In sum, one can conclude that except for one case in each group, the profiles of the mothers of a particular group of adolescents are similar. Thus, on the basis of the predictor variables, one can accurately classify the mothers in a manner that is consistent with their sons' placements.

DISCUSSION

Personality Trait Differences

In contrast to previous studies, the present study did not support the postulation that the failure to develop a traditional and stable sex-role is a contributing etiological agent in various forms of psychopathology. Based on the results of this study, disturbances in sex-role identity, as measured by the FDCT, does not appear to be related to the development of the adolescent psychopathology surveyed. The possession of particular personality traits, however, may be important for normal functioning. Dominance and endurance, two traditionally male sex-linked personality traits seem to be important for adequate functioning among male adolescents. Nurturance, a traditionally female sex-linked personality trait, also seems to be important. Whether a deficiency in these personality traits is a cause of a psychological disturbance or an effect of a psychological disturbance cannot be determined on the basis of this study.

In sum, then, it appears that normal and antisocial adolescents are more influencing or controlling than the mixed adolescents. Normal adolescents also persist in tasks that are undertaken to a greater degree than the mixed and

antisocial adolescents. Not being able to extend emotional benefits to others, at least to the extent shown by the adolescents in this study, is associated with various forms of psychopathology other than antisocial acts.

The greater amount of dominance, endurance, and nurturance found in the normal groups may not be important for their sex-linked qualities, but instead due to their reinforcing qualities. Contemporary society rewards individuals who are assertive and can endure in endeavors (e.g. college, promotions). Individuals with more of these traits, are more likely to receive more positive reinforcements from society, and thus, it is less likely that they would engage in deviant behaviors in comparison to those who are not receiving as much social reinforcement. Individuals weaker on these traits are less likely to receive positive reinforcements and the probability is high that their adjustment would not be as good as those who are receiving more positive reinforcements from society.

An examination of the definitions of dominance, endurance and nurturance, the scales on the ACL in which the groups differed, may help in seeing how these traits relate to adolescent psychopathology. Dominance is defined in the following manner: "to seek and sustain leadership roles in groups or to be influential and controlling in individual relationships." Indicative adjectives are: aggressive, argumentative, autocratic, demanding, dominant, forceful,

initiative, outgoing, resourceful, and strong. Contra-indicative adjectives are, for example, the following: apathetic, effeminate, inhibited, meek, retiring, shy, suggestible, and unambitious (Gough and Heilbrun, 1965, p. 7). Endurance is defined as: "to persist in any task undertaken." Adjectives scored for endurance include: determined, industrious, painstaking, persevering, and steady. Contra-indicative adjectives include: painstaking, quitting, slipshod, and careless (Gough and Heilbrun, 1965, p. 7). Nurturance is defined in the following manner: "to engage in behaviors which extend material or emotional benefits to others." Indicative adjectives are affectionate, appreciative, considerate, cooperative, forgiving, friendly, kind, loyal, sentimental, softhearted, thoughtful, and trusting. Contra-indicative adjectives are: aloof, bitter, arrogant, cold, distrustful, greedy, hostile, nagging, selfish, snobbish, unfriendly, and vindictive (Gough and Heilbrun, 1965, p. 8).

It appears that dominance, endurance, and nurturance, as measured by this scale, are aspects of assertiveness. Although assertiveness is frequently thought of as involving aggressive behavior, Wolpe (1969) points out that it also involves the ability to express friendly and affectionate feelings. Because the normal adolescents scored higher on dominance, endurance, and nurturance than the mixed youngsters, it seems likely that they are more assertive. The

antisocial youngsters fell between the normal and mixed groups on dominance, not statistically differing from either group. In conjunction with the fact that the normals scored higher on endurance than the antisocial youngsters, it is probable that the antisocial youngsters are intermediate between the normal and mixed adolescents on assertiveness. The number of depressed, fearful, and overtly anxious youngsters in the mixed group further supports the idea that this is the least assertive group.

The finding that psychopathology in males is associated with less assertiveness, traditionally considered a male characteristic, is related to other findings in the literature. Cheek (1964) found that male schizophrenics showed low activity rates and low dominance behaviors. Lorr and Klett (1965) found that psychotic men were more apathetic in comparison to psychotic women, and McClelland and Watt (1968) called attention to the finding that male schizophrenics avoid assertive male identities. Thus, the association of low dominance and assertiveness with psychopathology in adults also held for the adolescents in the present study.

If this hypothesis is correct, i.e. it is not the sex-linked qualities of these traits that is important but their reinforcement potential, then one would expect normal females to differ from disturbed females on the same traits. Consistent with this, Heilbrun and Fromme (1965) found that among college females, better adjusted adolescent girls

identified more with low-feminine mothers than more maladjusted girls. The more maladjusted girls identified with high-feminine mothers (femininity was based on their scores on the PDS). Thus, if it was found that normal females differed from disturbed females on the same traits and in the same direction as did their male counterparts in this study, it would support the theory that these traits are not sex-linked, but important due to their reinforcement potential.

Since it can be assumed that parental expectations influence the manner in which parents raise their children, by examining the personality traits the parents of these adolescents would like their sons to have, it is possible to get an idea of the type of role that the parents tried to prepare their sons for. Although the fathers themselves did not differ on any of the traits as measured by the ACL, they did differ in their expectations for their sons. The fathers of the normal adolescents expected their sons to be more dominating and achieving than the fathers of both the mixed and antisocial adolescents, with no differences between the fathers of the latter two groups. The fathers of the normal adolescents also expected their sons to be more enduring than the fathers of the antisocial adolescents, but not different from the fathers of the mixed adolescents.

Almost identical to their spouses, the mothers differed in their expectations on two of the three same traits: achievement and endurance. Mothers of normal adolescents

expected their sons to be more enduring than the other mothers and more achieving than the mothers of the mixed adolescents, but not any more so than mothers of the antisocial adolescents.

Summarizing, the results indicated that differences in the adolescents and in parental expectations occurred mostly on personality traits that are traditionally viewed as masculine. It seems likely that the parents of the normal adolescents reinforced dominating, achieving, and enduring behaviors in their sons to a greater extent than the parents of the other adolescents. Though there were consistent differences on traits that are traditionally viewed as belonging to males, and while it is possible that they may be sex-linked, these traits, as noted above, are more likely to bring reinforcements. Thus, the implication is that less adequate personality functioning may be associated with parents who report less expectation of personality traits that would increase the probability of their sons receiving positive reinforcement from society.

As mentioned previously, the fathers did not differ on any of the scales on the ACL. The mothers did differ on some of the traits. Mothers of the normals had higher affiliation score than both groups of mothers and higher heterosexuality scores than mothers of antisocial adolescents. They also have lower succorance and abasement scores than both groups of mothers. Thus, the normal mothers seek out

personal friendships and interact with opposite-sex peers to a greater extent and do not solicit sympathy or emotional support, or express feelings of inferiority to the extent that the other mothers do. It seems, then, that the mothers of the normals are more outgoing and confident in themselves than the mothers of the other groups.

Sex-Role Identity

It has previously been mentioned that there were no differences between any of the groups on sex-role identity as measured by the FDCT. Also, no differences were found between the groups on their sex-role preference, i.e. their ideas and interests as measured by the Femininity Scale. What seems more important than the sex-role identity of the adolescent is the possession of particular traits that increase the probability of receiving positive reinforcement.

The results of this study do not support the theory that antisocial behavior in males is a form of hypermasculine restitution in which they are defending against an unconscious feminine identity (e.g. Bacon, Child and Barry, 1963; Miller, 1958; Rosenfeld, 1969; Schilder, 1936). Perhaps the reason the results obtained in this study differ from other studies is that most of the previous research studied boys from broken and disorganized families. Research indicates that the lack of a father or father surrogate in the early years makes it more difficult for males to have a

masculine sex-role identity (Biller, 1971). The boys in the present study came from intact families. Therefore, it is probable that their fathers were more available and accessible to their sons, and made it easier for their sons to identify with a masculine sex-role identity than the fathers in the other studies. Glueck and Glueck (1950) and Bandura and Walters (1959), for example, found that the antisocial boys in their studies were not able to identify with their fathers.

Besides coming from broken or disorganized families, most of the troubled adolescents previously studied have been institutionalized or incarcerated. It may not be at all accurate to generalize from the outpatient boys in this study to institutionalized youngsters. However, previous research has usually been generalized to outpatient troubled adolescents and the present research indicates that such generalizations were probably not warranted.

Not only were there no differences in sex-role identity among the adolescents, there were also no differences in sex-role among their models (parents). Of crucial importance is the fact that the three groups of parents reported different ideal expectations in terms of the traits they would like their sons to possess. Therefore, it is plausible that the results are not due to differences in identification with their models, but instead due to the greater likelihood that specific traits such as dominance, endurance, and nurturance,

are differentially reinforced.

Perception of Parental Sex-Role Behavior

The three groups of adolescents in this study did not differ in their perceptions of their parents sex-role behavior. This finding suggests that differences in functioning between the three groups is not due to differences in how they perceive their parents. This finding is consistent with the previous conclusions that the differences between the three groups are probably not related to their identification with differing sex-role models but more likely due to the differing personality traits that their parents prefer and reinforce.

Discriminant Analysis

It was noted in the above that although the normal adolescents and their parents did not differ significantly on many variables, there were differences in their means in the predicted direction for the normal adolescents and their parents. The two psychiatric groups generally did not differ from each other, and on the few occasions in which they did, there was no pattern to the differences. Looking at the results, then, it is clear that with only a few exceptions, each of these variables separately have a weak effect in differentiating between the groups. However, when taken together and the optimal weights which will maximize the separation between the groups are found and applied,

then the predictor variables accurately separate the groups.

This clear separation when taking into account the optimally weighted linear combination of the variables employed demonstrates that the subjects in this study could be reliably placed into the three diagnostic categories on the basis of the measures utilized in this study. The lack of a general differentiation of the three groups when each variable is examined separately indicated that although the variables taken together are a reliable differentiator of the diagnostic categories, the effect of most of the variables examined separately is not strong enough to differentiate the groups.

Limitations and Conclusions

Since a random selection of adolescents fitting the original criteria for inclusion in the study was not possible, it was subsequently not possible to match them on social class variables. In addition, they differed on IQ. Whereas these differences were able to be controlled statistically when comparisons were made between the groups, they exert an unknown influence on the results of the Multiple Discriminant Analysis. Thus, less emphasis was placed on the results obtained from the Discriminant Analysis. It is also important to note that the results of this study are limited to out-patient adolescents who fit the criteria for inclusion in this study. The results, therefore, are limited in genera-

lizability, since they may be applicable to those who are institutionalized or incarcerated for the behaviors specified.

Nevertheless, the results of this study do indicate that sex-role identity or functioning may not be related to the degree of adequacy of functioning in adolescents who are disturbed but not to the point where institutionalization is required. It has generally been accepted that a sex-role disturbance is associated with any form of psychopathology. The results of the present study cast considerable doubt on this traditional assumption that sex-role disturbance is related to all forms of psychopathology. Instead, it appears that the possession of certain personality traits (dominance, endurance, and nurturance) are important for more adequate personality functioning. The finding that being nurturant is related to more adequate functioning, seems to be in line with the changes that are occurring in contemporary society. Although slow to respond in comparison to females, it has become more acceptable for men to show feelings and needs. Encouraging in males a greater sensitivity to others is a recent development, and this is part of being nurturant. While some of the characteristics traditionally considered masculine are important for adequate functioning in adolescents, the possession of traditional female characteristics need not be excluded, and at least in regard to nurturance, may be important for adequate

functioning in contemporary society.

This study attempted to look at some very broad issues and was not designed to provide definitive information on all of them, but to provide some initial information that would serve as an impetus for a more in-depth study of any one of these issues. Since certain segments of society are working for the abolition of sex-role stereotyping, the results of this study indicate that the characteristics and traits that are important for adequate and/or optimal functioning be further delineated, not just for males, but for females also. It is probable for example, that dominance and endurance may not be sex-linked, but important for optimal functioning in females as well.

APPENDIX A

Analysis of Differences on Occupation, Education,
and IQ by Use of Dunnett's t Statistic

Occupation:

	Normal
Mixed	3.20*
Antisocial	4.07*

Education:

	Normal
Mixed	3.38*
Antisocial	3.94*

IQ:

	Normal
Mixed	3.51*
Antisocial	1.81

* $p < .005$

df = 2,45

APPENDIX B

Number of Correct Responses For Each
 Trait on The Parental Description Survey
 and Resultant χ^2 Values

<u>Trait</u>	<u>Group</u>			<u>χ^2</u>
	<u>Normal</u>	<u>Mixed</u>	<u>Antisocial</u>	
Achievement	14	10	9	3.58
Autonomy	9	9	13	2.99
Dominance	14	11	12	1.35
Endurance	13	12	13	.17
Deference	13	13	14	.64
Affiliation	8	11	12	3.58
Succorance	14	12	9	3.41
Abasement	12	11	12	.13
Nurturance	8	7	10	1.07

df = 2

APPENDIX C

Analysis of Covariance Results Comparing
the Three Groups of Adolescents

<u>Variable</u>	<u>F value</u>
Achievement	2.80
Dominance	3.61*
Endurance	4.20*
Autonomy	.13
Nurturance	5.40+
Affiliation	2.38
Succorance	1.71
Abasement	1.86
Deference	.25
Heterosexuality	2.19
Masc.-Fem.	1.79

* $p < .05$

+ $p < .01$

df = 2,45

APPENDIX C

Analysis of Covariance Results Comparing
the Three Groups of Fathers

<u>Variable</u>	<u>F Value</u>	<u>Variable</u>	<u>F Value</u>
Achievement-S	1.54	Achievement-I	4.72*
Dominance-S	.41	Dominance-I	4.21*
Endurance-S	1.35	Endurance-I	4.97*
Autonomy-S	.04	Autonomy-I	.23
Nurturance-S	1.78	Nurturance-I	.93
Affiliation-S	.21	Affiliation-I	1.28
Succorance-S	.65	Succorance-I	.15
Abasement-S	.89	Abasement-I	1.22
Deference-S	.17	Deference-I	.64
Heterosexuality-S	.35	Heterosexuality-I	.41
Masc.-Fem.-S	.26	Masc.-Fem.-I	.72

S = Self Check

I = Ideal Check

* $p < .05$

df = 2,46

APPENDIX C

Analysis of Covariance Results Comparing
the Three Groups of Mothers

<u>Variable</u>	<u>F Value</u>	<u>Variable</u>	<u>F Value</u>
Achievement-S	2.52	Achievement-I	3.87*
Dominance-S	1.77	Dominance-I	.11
Endurance-S	2.42	Endurance-I	4.19*
Autonomy-S	.07	Autonomy-I	2.67
Nurturance-S	3.04	Nurturance-I	1.37
Affiliation-S	5.18+	Affiliation-I	.62
Succorance-S	3.96*	Succorance-I	.81
Abasement-S	3.50*	Abasement-I	1.96
Deference-S	.96	Deference-I	2.01
Heterosexuality-S	3.38*	Heterosexuality-I	.02
Masc.-Fem.-S	2.56	Masc.-Fem.-I	1.90

S = Self Check

I = Ideal Check

* $p < .05$ + $p < .01$

df = 2,46

APPENDIX D

Mean Values of The Predictor Variables
for The Adolescents

Variable	<u>Group</u>		
	Mixed	Normal	Antisocial
Achievement	39.88	51.35	43.76
Dominance	40.17	51.05	46.47
Endurance	40.11	50.17	41.94
Autonomy	49.88	49.05	50.64
Nurturance	40.17	49.82	47.41
Affiliation	40.76	48.64	46.05
Succorance	54.76	48.17	54.29
Abasement	56.05	47.76	51.82
Deference	51.00	47.58	47.58
Heterosexuality	45.64	50.76	50.88
Masc.-Femininity	2.29	-2.41	0.82
Femininity Scale	16.47	16.76	16.64
PDS	5.58	6.17	6.11
FDCT	19.52	19.41	19.29

APPENDIX D

Mean Values of The Predictor Variables
For The Fathers

Variable	Normal	Group Mixed	Antisocial
Achievement-S	58.23	51.00	50.94
Dominance-S	56.35	52.17	49.88
Endurance-S	58.52	53.58	51.64
Autonomy-S	45.23	45.70	45.88
Nurturance-S	57.00	58.11	52.00
Affiliation-S	52.58	51.70	49.58
Succorance-S	44.29	47.58	50.47
Abasement-S	46.64	48.76	51.64
Deference-S	52.76	53.47	52.23
Heterosexuality-S	51.88	48.94	48.64
Masc.-Fem.-S	-3.41	-1.76	-0.47
Achievement-I	65.35	59.00	56.58
Dominance-I	62.58	58.11	55.58
Endurance-I	63.35	61.64	57.23
Autonomy-I	47.52	45.64	46.17
Nurturance-I	58.35	59.52	56.58
Affiliation-I	55.76	58.64	55.47
Succorance-I	38.29	40.70	41.05
Abasement-I	42.35	44.23	45.82
Deference-I	47.70	51.52	53.52
Heterosexuality-I	52.52	55.88	53.70
Masc.-Fem.-I	-9.05	-9.11	-7.05
Femininity Scale	17.17	17.70	18.00
FDCT	19.52	18.64	20.47

APPENDIX D

Mean Values of The Predictor Variables
for The Mothers

Variable	Normal	Group	
		Mixed	Antisocial
Achievement-S	52.76	46.17	49.35
Dominance-S	50.00	46.94	47.82
Endurance-S	55.64	49.70	51.64
Autonomy-S	42.23	46.11	45.94
Nurturance-S	57.11	51.76	52.29
Affiliation-S	53.11	43.88	43.70
Succorance-S	47.47	52.52	50.11
Abasement-S	50.94	54.58	53.35
Deference-S	55.76	52.52	55.52
Heterosexuality-S	49.52	47.58	44.35
Masc.-Fem.-S	2.00	4.76	4.17
Achievement-I	63.29	55.11	58.64
Dominance-I	61.41	59.05	59.17
Endurance-I	64.05	58.47	60.11
Autonomy-I	47.58	50.17	46.23
Nurturance-I	57.64	55.11	58.35
Affiliation-I	56.17	53.58	55.94
Succorance-I	37.05	36.70	37.17
Abasement-I	41.23	39.64	42.00
Deference-I	50.58	48.17	51.41
Heterosexuality-I	52.94	52.58	52.47
Masc.-Fem.-I	-10.52	-6.11	-7.35
Femininity Scale	24.00	24.29	23.76
FDCT	20.94	19.58	19.58

APPENDIX D

Evaluation of Classification Functions for Each Case of Adolescents

Case	Mixed		Antisocial		Normal	
	Largest Probability	Function Number for Largest Probability	Largest Probability	Function Number for Largest Probability	Largest Probability	Function Number for Largest Probability
1	.60	1	.96	2	.56	2
2	.70	1	.60	3	.75	3
3	.94	1	.50	2	.90	3
4	.91	1	.70	2	.84	3
5	.51	2	.43	1	.82	3
6	.79	1	.80	1	.68	3
7	.75	1	.72	2	.51	2
8	.68	3	.98	2	.48	2
9	.79	1	.54	1	.71	3
10	.88	1	.97	2	.92	3
11	.48	2	.84	2	.61	3
12	.52	1	.94	2	.62	1
13	.53	1	.60	2	.51	3
14	.86	1	.73	2	.82	3
15	.56	3	.65	2	.66	1
16	.88	1	.90	3	.85	2
17	.53	3	.53	2	.77	1

1 = mixed

2 = normal

3 = antisocial

APPENDIX D
Evaluation of Classification Functions for Each Case of Fathers

Case	<u>Normal</u>		<u>Mixed</u>		<u>Antisocial</u>	
	Largest Probability	Function for Largest Probability	Largest Probability	Function for Largest Probability	Largest Probability	Function for Largest Probability
1	.99	1	.77	2	.96	3
2	.98	1	.64	2	.63	3
3	.85	1	.96	2	.96	3
4	.49	2	.99	2	.94	3
5	.90	1	.50	2	.99	3
6	.97	1	.76	2	.59	3
7	.75	1	.61	3	.59	2
8	.94	1	.79	2	.86	3
9	.99	1	.82	2	.85	3
10	.98	1	.62	2	.99	3
11	.94	1	.93	2	.83	3
12	.65	1	.99	2	.54	2
13	.52	2	.58	2	.74	2
14	.90	1	.98	2	.99	3
15	.99	1	.98	2	.95	3
16	.62	2	.95	1	.77	3
17	.86	1	.72	2	.99	3

1 = normal

2 = mixed

3 = antisocial

APPENDIX D

Evaluation of Classification Functions for Each Case - Mothers

Case	Normal		Mixed		Antisocial	
	Largest Probability	Function Number for Largest Probability	Largest Probability	Function Number for Largest Probability	Largest Probability	Function Number for Largest Probability
1	.99	1	.99	2	.97	3
2	.99	1	.94	2	.97	3
3	.49	3	.74	2	.90	3
4	.51	1	.91	2	.89	3
5	.72	1	.99	2	.72	3
6	.99	1	.93	2	.99	3
7	.96	1	.51	3	.83	3
8	.84	1	.99	2	.93	3
9	.97	1	.85	2	.90	3
10	.96	1	.71	2	.98	3
11	.81	1	.99	2	.79	3
12	.99	1	.90	2	.51	2
13	.96	1	.74	2	.99	3
14	.98	1	.89	2	.63	3
15	.99	1	.99	2	.95	3
16	.81	1	.99	2	.71	3
17	.99	1	.97	2	.68	3

1 = normal

2 = mixed

3 = antisocial

BIBLIOGRAPHY

- Albert, L. An exploratory study of sex-role identification and developmental level as they relate to particular crimes. Dissertation Abstracts International, 1970, 31, 1003A-1004A.
- Anastasi, A., and Schaefer, C. The Franck Drawing Completion Test as a measure of creativity. Journal of Genetic Psychology, 1971, 119, 3-12.
- Bacon, M., Child, I., and Barry, H. III. A cross-cultural study of correlates of crime. Journal of Abnormal and Social Psychology, 1963, 66, 291-300.
- Bach, G., and Bremer, G. Projective father fantasies of pre-adolescent, delinquent children. Journal of Psychology, 1947, 24, 3-17.
- Bandura, A., and Walters, R. Adolescent Aggression. N.Y.: Ronald Press Company, 1959.
- Beitner, M. Word meaning and sexual identification in paranoid schizophrenics and anxiety neurotics. Journal of Abnormal and Social Psychology, 1961, 63, 289-293.
- Biller, H. Father, Child, and Sex Role. Lexington, Mass.: D. C. Heath and Company, 1971.
- Biller, H., and Barry, W. Sex role patterns, paternal similarity, and personality adjustment in college males. Developmental Psychology, 1971, 4, 107.
- Biller, H., and Poey, K. An exploratory comparison of sex-role related behavior in schizophrenics and non-schizophrenics. Developmental Psychology, 1969, 1, 629.
- Bosselman, B., and Skorokin, B. Masculinity and femininity in psychotic patients; as measured by the Terman-Miles Interest-Attitude Analysis Test. American Journal of Psychiatry, 1940, 97, 699-702.
- Broverman, D. Generality and behavioral correlates of cognitive styles. Journal of Consulting Psychology, 1964, 28, 487-500.

- Burton, R., and Whiting, J. The absent father and cross-sex identity. Merrill-Palmer Quarterly of Behavior and Development, 1961, 7, 2.
- Cheek, F. A serendipitous finding: sex roles and schizophrenia. Journal of Abnormal and Social Psychology, 1964, 69, 392-400.
- Cosentino, F., and Heilbrun, A. Jr. Anxiety correlates of sex-role identity in college students. Psychological Reports, 1964, 14, 729-730.
- Elfert, D. Sex-role identification in ambulatory schizophrenics and neurotics: A comparative study of levels of sexual identity. Dissertation Abstracts International, 1972, 32, 4207B-4208B.
- Eliasberg, A. Are you hurting your daughter without knowing it? In W. Martin (ed.). The American Sisterhood, N.Y.: Harper and Row, 1972.
- Franck, K., and Rosen, E. A projective test of masculinity-femininity. Journal of Consulting Psychology, 1949, 13, 247-256.
- Garmezy, N., Clarke, A., and Stockner, C. Child rearing attitudes of mothers and fathers as reported by schizophrenic and normal patients. Journal of Abnormal and Social Psychology, 1961, 63, 176-192.
- Glueck, S., and Glueck, E. Unraveling juvenile delinquency. Cambridge: Harvard University Press, 1950.
- Gough, H. Manual for the California Psychological Inventory. Palo Alto, California: Consulting Psychologists Press, Inc., 1957.
- _____. A cross-cultural analysis of the California Psychological Inventory femininity scale. Journal of Consulting Psychology, 1966, 30, 136-141.
- Gough, H. and Heilbrun, A. Jr. The Adjective Check List Manual, Palo Alto, California: Consulting Psychologists Press, Inc., 1965.
- Gregory, I. Anterospective data following childhood loss of a parent: I. Delinquency and high school dropout. Archives of General Psychiatry, 1965, 13, 99-109.

Gross, L. Minnesota Multiphasic Personality Inventory, L-F-K relationships with criteria of behavioral disturbance and social adjustment in a schizophrenic population. Journal of Consulting Psychology, 1959, 23, 319-323.

Hays, W. Statistics. N.Y.: Holt, Rinehart and Winston, Inc., 1963.

Heilbrun, A. Jr. Validation of a need scaling technique for the Adjective Check List. Journal of Consulting Psychology, 1959, 23, 347-351.

_____. Parental Identification and College Adjustment. Psychological Reports, 1962, 10, 853-854.

_____. Conformity to masculinity-femininity stereotypes and ego identity in adolescents. Psychological Reports, 1964, 14, 351-357.(a)

_____. Parent model attributes, nurturant reinforcement, and consistency of behavior in adolescents. Child Development, 1964, 35, 151-167. (b)

_____. Perceived maternal attitudes, masculinity-femininity of the maternal model, and identification as related to incipient psychopathology in adolescent girls. Journal of General Psychology, 1964, 70, 33-40. (c)

_____. Social value-social behavior consistency, parental identification, and aggression. Journal of Genetic Psychology, 1964, 135-146. (d)

_____. An empirical test of the modeling theory of sex-role learning. Child Development, 1965, 36, 789-799. (a)

_____. The measurement of identification. Child Development, 1965, 36, 111-127. (b)

_____. Sex differences in identification learning. Journal of Genetic Psychology, 1965, 106, 185-193. (c)

Heilbrun, A. Jr., and Fromme, D. Parental identification of late adolescents and level of adjustment: the importance of parent model attributes, ordinal position and sex of child. Journal of Genetic Psychology, 1965, 107, 49-59.

- Hole, J., and Levine, E. Rebirth of Feminism. N.Y.: Quadrangle Books, Inc., 1971.
- Hollingshead, A. Two factor index of social position. New Haven, Conn.: August B. Hollingshead, Yale Station, 1957.
- Johnson, M., and Meadow, A. Prenatal identification among male schizophrenics. Journal of Personality, 1966, 34, 300-309.
- Kagan, J. Acquisition and significance of sex typing and sex-role identity. In M. L. and L. W. Hoffman (eds.) Review of Child Development Research, N.Y.: Russell Sage Foundation, 1964, Pp. 137-167.
- Kayton, R., and Biller, H. Perception of parental sex-role behavior and psychopathology in adult males. Journal of Consulting and Clinical Psychology, 1971, 36, 235-237.
-
- Sex-role development and psychopathology in adult males. Journal of Consulting and Clinical Psychology, 1972, 38, 208-210.
- Kohlberg, L., LaCross, J., and Hicks, D. The predictability of adult mental health from childhood behavior. In B. Wolman (ed.), Manual of Child Psychopathology, N.Y.: McGraw-Hill, Inc., 1972, Pp. 1217-1284.
- Lidz, T. The family and human adaptation: three lectures. N.Y.: International Universities Press, 1963.
- Lindner, R. Rebel without a cause: the hypnoanalysis of a criminal psychopath. N.Y.: Grune and Stratton, 1944.
- Lorr, M., and Klett, C. Constancy of psychotic syndromes in men and women. Journal of Consulting Psychology, 1965, 29, 309-313.
- Lorr, M., O'Connor, J., and Stafford, J. The psychotic reaction profile. Journal of Clinical Psychology, 1960, 16, 241-245.
- Lott, B. Who wants the children? Some relationships among attitudes toward children, parents, and the liberation of women. American Psychologist, 1973, 28, 573-582.
- MacDonald, M. Criminally aggressive behavior in passive, effeminate boys. American Journal of Orthopsychiatry, 1938, 8, 70-78.

- McClelland, D., and Watt, N. Sex-role alienation in schizophrenia. Journal of Abnormal Psychology, 1968, 73, 226-239.
- Miller, D., and Swanson, G. Inner conflict and defense. N.Y.: Holt, 1960.
- Miller, W. Lower class culture as a generating milieu of gang delinquency. Journal of Social Issues, 1958, 14, 5-19.
- Mowrer, O. Identification, a link between learning theory and psychotherapy. In Learning theory and personality dynamics, N.Y.: Ronald Press, 1950, Pp. 573-616.
- Piety, K. Patterns of parent perceptions among neuropsychiatric patients and normal controls. Journal of Clinical Psychology, 1967, 23, 428-433.
- _____. Perceptual dissonance and role learning. Journal of Clinical Psychology, 1966, 22, 10-14.
- Planansky, K., and Johnson, R. The incidence and relationship of homosexual and paranoid features in schizophrenia. Journal of Mental Sciences, 1962, 108, 604-615.
- Robins, L. Deviant Children Grown Up. Baltimore: The Williams and Wilkins Company, 1966.
- Rosenfeld, H. Delinquent acting-out in adolescent males and the task of sexual identification. Smith College Studies in Social Work, 1969, 40, 1-29.
- Rychlak, J., and Legerski, A. A sociocultural theory of appropriate sexual role identification and level of personality adjustment. Journal of Personality, 1967, 35, 31-49.
- Schilder, P. The Analysis of Ideologies as a Psycho-Therapeutic Method, Especially in Group Treatment. American Journal of Psychiatry, 1936, 93, 601-624.
- Sears, R. Relation of early socialization experiences to aggression in middle childhood. Journal of Abnormal and Social Psychology, 1961, 63, 466-492.
- Winer, B. Statistical Principles in Experimental Design. N.Y.: McGraw-Hill Book Company, Inc., 1962.
- Wolpe, J. The practice of behavior therapy. N.Y.: Pergamon Press, 1969.

Zeichner, A. Conception of masculine and feminine roles in paranoid schizophrenia. Journal of Projective Techniques, 1956, 20, 348-354.

_____. Psychosexual identification in paranoid schizophrenia. Journal of Projective Techniques, 1955, 19, 67-77.

PERMANENT RECORD

SOUTHWORTH CO. U.S.A.

TO SECTION FIVE CONTENT