

MASCULINITY, FEMININITY AND PERCEPTION OF
WARMTH AND SALIENCY IN PARENT-SON RELATIONSHIPS

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ABSTRACT

MASCULINITY, FEMININITY AND PERCEPTION OF WARMTH AND SALIENCY IN PARENT-SON RELATIONSHIPS

by Cyrus Azimi

The general purpose of the present study was to test the assumption that an individual's perception of his parents as projected in his stories to a set of thematic pictures, would be significantly related to his preference for specific roles and behavioral patterns.

Subjects were 100 male students at Michigan State University during the Winter Term 1964 whose ages were between 18 to 21. They were asked to write short stories to six pictures, five of which were adopted from the Thematic Apperception Test and the sixth one from the Michigan Picture Test. The pictures were projected on the screen for two minutes and the subjects were allowed five minutes to write each story. They were instructed to imagine a father-son relationship in three of the cards (Cards 7 BM, 8 BM, and 12 M) and a mother-son relationship in the other three cards (Cards 6 BM, 5, and 11 B). In addition, they were given the standard TAT instructions.

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Upon the completion of the stories, Ss' were given the Draw-A-Person Test and completed the short form of the Minnesota Multiphasic Personality Inventory which included the masculinity-femininity scale.

The stories were then rated on two five-point scales of warmth and saliency. The MMPI profiles were scored for the masculinity-femininity scale. Each set of drawings was scored on Swensen's five-point and nine-point scales of sexual differentiation. The data were analyzed by a CDC 3600 computer at M.S.U. Correlation coefficients among the ratings of warmth and saliency in the stories, degree of sexual differentiation, and the masculinity-femininity scores were computed. The results supported the following four of five initially proposed predictions.

1. A significant positive correlation was found between the preference for culturally accepted masculine roles and behavioral patterns and the projection of warm father-son relationships in the thematic stories given by young adult males.
2. A significant positive correlation was found between the preference for culturally accepted feminine roles and behavioral patterns of warm mother-son relationships in the thematic stories given by young adult males.
3. A significant positive correlation was found between the preference for culturally accepted masculine



roles and behavioral patterns and the projection of salient father-son relationships in the thematic stories given by young adult males.

4. A significant positive correlation was found between the preference for culturally accepted feminine roles and behavioral patterns and the projection of salient mother-son relationships in the thematic stories given by young adult males.

The data did not support the fifth initially proposed prediction.

5. No significant correlation was found between the scores on the MF scale and the measures of sexual differentiation as shown by the drawings.

The results were discussed within the framework of the theories of identification. It was concluded that both warmth and saliency contributed to the development of masculine or feminine interest patterns. Moreover, the high correlations between the ratings on warmth and saliency show a very high degree of communality in these two variables.



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By

Cyrus Azimi

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To my wife, Forough, whose patience
and encouragement never failed me.



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I. INTRODUCTION

The complex nature of present day societies places certain restraints upon the manifestation of relevant roles and behavioral patterns. In spite of the less differentiated and changing sex roles of today, society and the established social mores deem still it necessary for the children to be sex-typed. For instance, there are certain patterns of behavior expected from the males, deviation from which either in the form of inadequate masculine role manifestations (what Stoke calls "mamma's boy or sissy-types"-Stoke, 1950), or in the form of deviant choice of love objects, are both frowned upon and unacceptable. How important this issue is can be seen in the taunts of "sissy" or "tomboy" hurled at the young "offenders" who cross sex roles in play, in the ostracism of an adolescent who fails to conform to type, and virtual rejection by both sexes of the extremely effeminate man or masculine woman.

The importance of sex-typing is especially evident within the family. Young boys are encouraged by their parents (particularly their fathers) to adopt and follow the culturally accepted masculine roles and behavioral patterns. Paternal rewards, punishments, close supervision and involvement with the growing son's life facilitate and

promote the establishment of such behavioral patterns. Lack of encouragement by parents (particularly the father) brings forth a failure to manifest accepted masculine roles and probable preference and demonstration of feminine behavioral patterns. It seems then that the role played by the paternal figure, in encouraging and promoting the demonstration of culturally accepted masculine roles and behavioral patterns, is very crucial.

The present thesis deals with the dimension of masculinity-femininity from the point of view of role preference and behavioral patterns on one hand, and perception of the parental figures on the other. The main hypotheses address themselves to the theme that a young male's perception of his parents can serve to demonstrate a reciprocal relationship between himself and that parent who has been more influential in his development of masculine or feminine role preference.



II. THEORETICAL BACKGROUND

A. The Concept of Identification

Sigmund Freud introduced the concept of identification into the literature. His earliest mention of the process of identification occurs in a letter to Wilhelm Fliess, which is dated May 31, 1897 (Freud, 1954). Freud also briefly discussed identification in Chapter IV of the Interpretation of Dreams and in Mourning and Melancholia. In a more extensive discussion of identification in his Group Psychology and the Analysis of the Ego, Freud defines identification as the "endeavor to mold a person's own ego after the fashion of the one that has been taken as a model" (Freud, 1921; p. 47). He further states, "Identification is known to psychoanalysis as the earliest expression of an emotional tie with another person." The importance of this concept is further derived from Freud's subsequent statement that, "the effect of the first identification in early childhood will be profound and lasting" (1927).

Upon the review of the Freudian literature, Stoke (1950) offers the following statement as providing a proper definition of identification:

From the wealth of context in which the term (identification) is used it is usually implied that a child gives its emotional allegiance to one of its parents and attempts to duplicate in its own life the ideas, attitudes, and behavior of the parent with whom it is identifying. There are occasional uses of identification in Freudian literature aside from the above, but this is the chief usage and the one which we shall be concerned with. (Stoke, 1950; p. 163.)

Stoke also views identification as the source of "our higher natures" and states that as an adult, a person's attitudes towards the opposite sex, towards his children, and his persistence in traditional ways all stem from the identification he has made as a young child with his parents.

Sanford, in an attempt to develop a more precise definition of identification, makes the following statement: "An individual may be observed to respond to behavior of other people or objects by initiating in fantasy or reality the same behavior in a way that is exactly like that of the object" (Sanford, 1955).

In the same vein, Henry's statement is in order:

Identification with significant figures in the child's environment, notably parents, provides the child with an initial sense of direction and gives him the assurance of a temporary fully made identity. In spite of the distinctness of self which may develop in the individual subsequently, it seems probable that he will retain to some degree certain features of affect and conviction which were characteristic of the models with whom he so closely identified in his early years. (Henry, 1956; p. 28.)



B. The Psychoanalytic Theory of Identification

The psychoanalytic theory of identification asserts that the chief factor in the development of identification in males is the growth and the resolution of the Oedipal complex. However, long before this process takes place, as soon as the infant boy is able to perceive his environment, he will attempt to relate to his surroundings through the manipulation of objects and incorporation of what he comes into contact through his mouth. An important function of his ego is the phenomenon of "fascination" of what goes on around him. A primitive attempt at the mastery of the intense stimuli which surrounds the infant takes place through the process of imitation of what is perceived and what is manipulated. Fenichel (1945) equates this primitive imitation of what is perceived with a "kind of identification, the awareness of what brings perception." He refers to this process as "primary identification" and states:

The concept of primary identification denotes that actually "putting into the mouth" and "imitation for perception's sake" are one and the same and represent the very first relation to objects. In this primary identification, instinctual behavior and ego behavior are not differentiated from each other. (Fenichel, 1945; p. 37.)

As the young boy grows, he begins to develop a true object-cathexis toward his mother. Around the age of three or four, he realizes that his father is a dangerous and powerful rival for his mother's affection and attention. His love and hate for his father brings forth strong

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ambivalent feelings in the boy which is disturbing to his developing ego. The threat of imaginary castration which his father and rival may carry out upon him if his incestuous desires for his mother are discovered becomes imminent. In view of this danger, the young boy represses his desire for his mother and identifies with the father. During this process he observes, imitates, and incorporates the attributes of his father. The more successful his repression of his incestuous desires and his identification with his father, the less he has to fear the impending castration. Thus the Oedipus complex is resolved through the process of identification with the father and repression of the desire for the mother. This process can be called "secondary identification" in contra-distinction to Fenichel's concept of "primary identification." The passing of the Oedipus complex thus consolidates the masculinity in the boy's character.

In the same connection, Mussen and Distler state:

By identification with his parents, the child begins to acquire his parents' personality characteristics, behavior, values, motivations, and attitudes. Two of the major consequences of the process of identification are the development of superego or conscience, and the acquisition of behavior and personality characteristics appropriate to his own sex (sex-typing). (Mussen and Distler, 1959; p. 351.)

Sears, Maccoby, and Levin (1957) also assert that, "although both boys and girls form their first identification with a female figure, the boy must shift to a masculine

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identification sometime in his early years, if he is to develop normally masculine personality."

Anna Freud (1947) forwards the concept of "Identification with the Aggressor." She states that through identification with his father, the boy's fears of counter-aggression are reduced, and at the same time he obtains his mother's approval by acting like his father.

C. The Learning Theory of Identification

A number of authorities deal with the development of identification within the context of the learning theory. Mowrer (1950), for example, treats the process of identification as a product of learning and social interaction. He distinguishes between imitation and identification. He proposes two different types of identification, namely the developmental identification and the defensive identification (which is synonymous with the concept of identification with the aggressor introduced by Anna Freud). This distinction was originally made by Lair (1949).

Developmental identification proceeds in the following manner: as an individual (typically the mother) satisfies the primary needs of the infant, the infant also sees, feels, hears, and even smells the satisfier. On the basis of conditioning, these stimuli acquire secondary reinforcement properties. Thus Mowrer (1950) suggests that most imitation of a model results from the drive and desire to reproduce



responses which have acquired secondary value through association with a nurturant and affectionate model. According to him, the utterance of the first words, the attempts made toward taking the first steps, and other similar activities demonstrated by a child are means of obtaining rewards from his eager parents and it is in this way that the child begins to learn his early disciplines such as talking, walking, manipulating objects, etc. The rewards given by the parents have thus played the crucial role.

However, at the age of about two or three, in the western cultures the parents begin to discipline the child. Now more attention is accorded to what the child does and less to what he wants. Parents who have previously been all "good" in the eyes of the child now become partly "bad" and this combination of attitudes on the part of the child precipitates a developmental crisis with high anxiety. It is at this point that a remarkable resolution of forces take place. At the height of his ambivalence and conflict, the child discovers that he can satisfy his parents and quell his inner conflicts by accepting their social values and standards of conduct as his own values and standards. Now when he begins to deviate from his parental standards, the child punishes himself and thus learns to refrain from such behavior. In everyday language, one would say that the child is displaying a conscience or that, in the psychoanalytic



phraseology, his superego is beginning to function. This introjection of parental mandates illustrates defensive identification which is equivalent to Anna Freud's earlier concept (Ann Freud, 1937).

Mowrer supports the application of the two forms of identification in the following manner:

It is probably only by allowing early experience to be divided into two stages--loving care and indulgence, which leads to developmental identification and skills; and discipline, which leads to defensive identification and character--that the basis is laid for normal personality and effective and satisfying participation in the adult life of one's society. (Mowrer, 1950; p. 596.)

It should be pointed out that Mowrer's statements are based upon the psychoanalytic theory of identification. The importance of both reward and punishment has been fully recognized by Freud and other psychoanalytically-oriented authorities in connection with the development of identification in the young child.

D. The Role Theory of Identification

The role theory of identification essentially follows a similar pattern but places emphasis on the issue of sex-typing and the proper social role. Importance is placed on the dominance and the involvement of the parental roles in the family. For instance, according to Sarbin's view (1954), the individual is most likely to assimilate the role of, or identify with, the individuals he sees as powerful. Thus, from the child's point of view, the most

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powerful individual is probably the one who most effectively controls and administers the rewards and punishments.

Since the infant's earliest experience of satisfaction is generally with the mother, it is inferred that there will be a tendency for children of both sexes to initially identify with their mothers. Later, when the orientation of sex roles becomes important, the boy is forcibly encouraged to take his father as a personal model. The role theory states that a boy is motivated to practice the father's role if he has a great deal of interaction with his father and if the latter is involved in his life as the administrator of reward and punishment towards the encouragement of the adoption of masculine roles and behavioral patterns. Under such circumstances, the child gets experience playing the father's role and adopts more of the father's characteristics, including those connected with his sex-typing and sex-role (Sarbin, 1954).

It appears, then, that the role theory of identification advocates that the significant factor in the development of identification of masculine roles in boys is the father's salience, i.e., his importance in the child's life and the clarity of the role he assumes within the family situation.

Sarbin further asserts:

Early in life, a child is taught acts which are differentiated for example according to sex. Little boys are rewarded or punished for certain kinds of



actions; little girls are rewarded or punished for other kinds of actions. Thus begins the acquisition of actions for the later performance of one's generalized sex role. (Sarbin, 1954; p. 226.)

The importance of the father's saliency is fully discussed by Bieber (1962) in his comprehensive study of the problem of homosexuality. He states, "The father who lives in the family group and yet has little contact with his son discourages the filial attachment and blocks the identification process."

This brief review of literature and the current theories of identification, especially the learning and role theories, provide the framework for the theoretical point of view of the present study.



III. STATEMENT OF THE PROBLEM

A. Brief Survey of Related Studies

The more currently accepted theories pertaining to the process of identification were discussed in the previous section. It was stated that within the framework of the learning theory, the young boy through the process of perception (which include seeing, feeling, and hearing) begins to imitate, copy, and finally introject the behavior of that parent who is seen as the primary source of both reward and punishment. The role theory also stressed the importance of the saliency of the paternal role and the father's involvement with the young boy as the primary factor in the development of identification. A combination of both rewards and punishment, together with the dominance and involvement of the paternal figure, influence the course of the young boy's masculine identification and his subsequent adult role and behavioral patterns.

A number of studies serve to illustrate the importance of reward and the saliency of the paternal role on the process of identification in the young boy. Specifically, the following studies point out the role of reward and the importance of the affection accorded by the father.

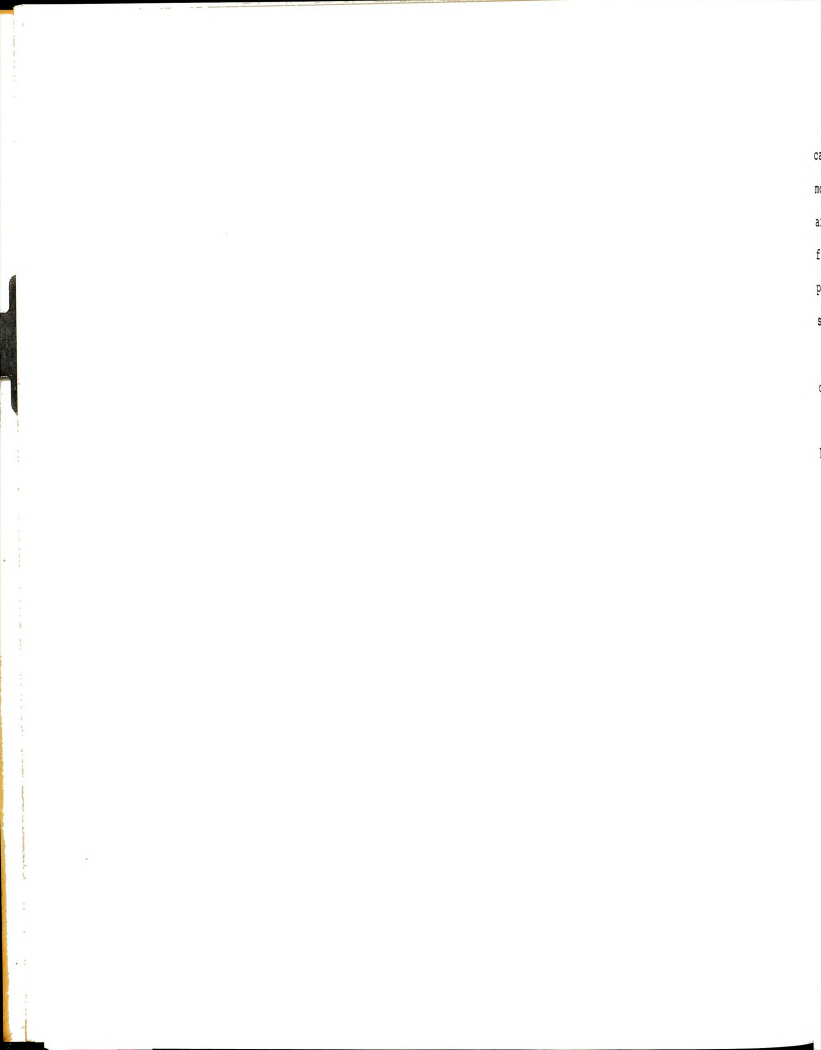
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Mussen and Distler (1959) administered the "It Scale for Children" (a test of sex-typing of interests consisting of 36 picture cards) to a group of kindergarten boys. They report that the ten boys scoring the highest on the test had developed the highest degree of male role identification while the ten boys scoring lowest were considered the least strongly identified with this role. Furthermore, young boys who were strongly identified with the male role perceived their fathers as more rewarding and nurturant in comparison with their weakly identified peers.

Sears (1953) has found that the five-year-old sons of warm, affectionate fathers tend to play the father role in doll-play activities more frequently than boys whose fathers were relatively cold. In so far as extent of playing this role may be an index of the degree of identification with the father, it may be inferred that warm fathers are likely to foster strong father identification in their sons.

Sears, Pintler, and Sears (1946) have demonstrated that if the father is absent from the home his pre-school-age son is likely to be delayed in acquiring sex-appropriate behavior pattern. However, the mere presence of the same-sex parent in the home is not enough to promote identification with him. The process is influenced by the degree of affection given to the child by the person with whom identification is attempted and the extent to which the child's needs are gratified by this person.



Seward (1946) states that clinical observation indicates that boys who prefer their mothers (i.e., see her as more rewarding and more affectionate) during their childhood are not likely to shift their identifications to their fathers. In such cases they are apt to adopt sex-inappropriate behavior patterns or to become conflicted about their sex roles.

The following studies tend to support the importance of role dominance.

Brown (1956) using the "It Scale" with children between 4-6 years of age reports the following results:

(a) large and significant differences occur between boys and girls suggesting the existence of definite, relatively dichotomous role patterns in young children; (b) boys show significantly greater preference for the masculine role than girls show for feminine role; (c) some children in both groups showed a strong opposite-sex role preference. This tendency was more frequent and more pronounced in girls than in boys.

Rabin and Limuaco (1959) in a study of the Filipino and American children have shown that in the more role-defined Filipino culture, boys and girls significantly surpass American children in their degree of sexual differentiation as shown by the Draw-A-Person test. Azimi, likewise (1960) has demonstrated that within the three present-day subcultures of Iran (namely village, traditional, and modern)

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boys who come from the more traditional backgrounds with more defined parental roles surpass the boys from modern homes (where a clear-cut parental role distinction does not exist) in the degree of sexual differentiation shown by their drawings.

B. Summary of the Important Factors Influential in the Process of Identification

The above studies demonstrate the existence of certain factors which are essential in the development of the same-sex role identification in boys. These factors are also congruent with the predictions and assumptions made by both learning and role theories:

- (a) The clarity and saliency of the role of the person with whom identification is attempted.
- (b) The degree of affection accorded to the child by the person with whom identification is attempted.
- (c) The degree of involvement which the identifier has with the identified person.
- (d) The social pressure and the punishment enforced upon the boy to identify with his own sex.

C. The Proposal

The behavioral patterns displayed by an adult individual are results of the process of identification. In other words, an individual's performance and preference for

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certain roles reflects the strength of the earlier identification he has established with the parent of the same-sex or the opposite sex.

The individual's perception of his parents, then, should serve to give a measure of the degree of his identification with the parent who has played the more important part in this process. The adult male who has developed adequate role identification should perceive his father as more rewarding, having a more dominant role, and being more interested in his welfare than the one who has failed to develop masculine role identification. In other words, it is expected that the adult males who demonstrate masculine role preference should perceive their fathers as warmer persons, having more dominant and salient roles in their lives, than those who fail to demonstrate such role preferences.

The above can be tested by using a projective technique which requires the individuals to produce a number of stories. It is expected that the males who prefer the masculine role would produce more stories involving a closer and warmer relationship with their fathers than the less masculine role preferring ones. Since the involvement of the father in the life of his son is thought to be important and crucial for the development of masculine role identification, it is also expected that masculine role preferring young males would give stories involving a more salient paternal role involvement more significantly

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The basic assumption underlying the use of a projective technique to depict an individual's perception of his parents follows the general hypothesis concerning the concept of projection, i.e., the way in which the individual perceives and interprets the test material or structures the situation reflects fundamental aspects of his psychological functioning. In other words, it is expected that the presented material would serve as a sort of screen upon which the subject "projects" his characteristic ideas, attitudes, aspirations, fears, worries, aggressions, and the like.

The broadest use of the term "projection" has been made in the field of clinical psychology in connection with projective techniques wherein the subject is presented with a number of ambiguous stimuli and is then invited to respond to them. By such means it is assumed that the subject projects his own needs and press, and that these will appear as responses to the ambiguous stimuli.*

In connection with the analysis of the stories given under such conditions, Henry states:

*For comprehensive discussions concerning the concept of projection and the use of projective techniques in clinical psychology numerous sources are available including Abt and Bellak, 1959; Henry, 1956; Murray, 1943; and Rabin and Haworth, 1960.

In the interpretation of fantasy, it is most productive to view the stories as a set of personal and social interactions with a reality defined by the picture. As the subject selectively re-defines the stimuli and reacts to them by the attributions of action and feeling, he defines for us, the interpreter, his habitual modes of reaction to situation parallel to the pictures. (Henry, 1956; p. 32.)

A study by Payne and Mussen (1956) using the similar principles stated above is worthy of attention. They administered 50 items from the California Psychological Inventory to a group of junior and senior high school boys. The 20 boys with highest father identification scores and the 20 boys with lowest scores were then given an incomplete-story test. Analysis of the data revealed a significant relationship between high father identification and perception of the father as a highly rewarding and affectionate person. For these boys, the degree of father identification was highly correlated with masculinity of attitudes. It was also noted that relatively masculine mothers tended to inhibit strong father identification in their sons.

D. Definition of Terminology

A number of variables are used in the present study, the definition of which is very important. Both conceptual and operational definitions are offered in each case.

(1) Role Preference

Conceptually, role preference is defined in terms of an individual's preference for and demonstration



of masculine or feminine roles and behavioral patterns. Masculine role preference refers to the demonstration of culturally accepted masculine roles, trends, occupations, and the appropriate modes of self-expression. Feminine role preference refers to the lack of demonstration of the above qualities.

Operationally, role preference is measured through the administration of a set of questions (the MF scale of the MMPI) dealing with one's attitudes towards interests in kinds of work, hobbies, social activities, etc. A high score would indicate inclinations towards the preference of specific roles depending upon the type of the instrument or scale used.

- (2) The variable of warmth is defined in terms of a positive relationship between two individuals which is further characterized by closeness, empathy, love, affection, and intimacy.

Operationally, this variable is measured by rating the stories given by an individual to a set of pictures illustrating father-son or mother-son relationships. The rating scale consists of five points, ranging from very high to very low degrees of warmth.

- (3) The variable of saliency is defined in terms of dominance, importance, involvement, and the impacts



of one person's influences on the course of action taken, or the role and behavioral pattern exhibited by another individual.

Operationally, the degree of saliency of the father-son or mother-son relationships can be obtained through a set of stories given by an individual to a number of thematic pictures. The variable is rated on a five-point scale ranging from very strong to very weak indications of saliency of role involvements.

(4) Sexual Differentiation

Sexual differentiation refers to the degree to which a subject discriminates or makes differences in his drawings of male and female figures.

Comparison of a set of drawings (including a male and a female figure) yields a measure of this variable which is then scaled on a nine-point scale ranging from very poor to very strong sexual differentiation.

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IV. STATEMENT OF THE HYPOTHESES

The general purpose of the present study is to test the assumption that an individual's perception of his parents projected in his stories to a set of thematic pictures is significantly related to his preference for specific roles and behavioral patterns. The following specific hypotheses are forwarded as ways of testing the general assumption set forth above:

Hypothesis I. There is a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the projection of warm father-son relationships in the thematic stories given by young adult males.

Hypothesis II. There is a positive relationship between the preference for culturally accepted feminine roles and behavioral patterns and the projection of warm mother-son relationships in the thematic stories given by young adult males.

Hypothesis III. There is a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the projection of salient

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father-son relationships in the thematic stories given by young adult males.

Hypothesis IV. There is a positive relationship between the preference for culturally accepted feminine roles and behavioral patterns and the projection of salient mother-son relationships in the thematic stories given by young adult males.

As a corollary to the above hypotheses, the question as to whether the variable of warmth or the variable of saliency in the father-son or mother-son relationships play the more crucial role in the development of masculine or feminine roles and behavioral patterns is also investigated.

Hypothesis V. There is a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the display of sexual differentiation in the human figure drawings produced by young adult males.



V. METHOD

A. Subjects

The subjects of this study were selected from among the freshmen and sophomore male students taking the introductory courses in psychology at Michigan State University during the Winter Term 1964. Sign-out sheets were circulated in the large lecture classes and the male students were asked to participate in an experiment involving paper-pencil tasks such as answering questionnaires.

One hundred and twenty male students ranging in age between 18 to 21 were tested. One hundred protocols were ultimately scored, 20 being eliminated for the following reasons:

lack of compliance with testing procedures or instructions:	5 protocols
both parents not living at the time of testing:	4 protocols
miscellaneous reasons such as incomplete production of stories, refusal to produce a story to a certain card, or incomplete drawings:	11 protocols

B. Testing Instruments

The testing instruments employed for the measurement of dependent variables included: (a) a set of thematic cards

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selected from the TAT (Morgan and Murray, 1935) and the Michigan Picture Test; (b) the MF scale of the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway and McKinley, 1951); and (c) the Draw-A-Person test (DAP) (Machover, 1949).

(a) The Thematic Apperception Test as a Projective Technique

The Thematic Apperception Test (TAT) is a projective technique which is widely employed in clinical and research studies as a means of investigating the dynamics of personality and interpersonal relationships. The test consists of male and female figures making a total of 31 cards. Subjects are asked to tell stories about selected pictures, thereby presumably revealing aspects of the personality of their authors to the investigator.

The rationale behind the interpretation of the thematic stories is discussed by Henry as follows:

The Thematic Apperception Technique is a method for studying the social and psychological aspects of personality. The story created to a picture is a crystallized and symbolic projection of the individual's efforts to formulate his major feelings, anxieties and satisfactions in the frame work of the manner in which he has previously learned to present himself to the outer world. The story is thus symptomatic of the individual's inner feelings and of his systems of defense and pretence. (Henry, 1956; p. 40.)

Since its publication in 1935, the amount of research carried out in connection with this technique has been tremendous. Each card has become the subject of reliability, validity, and content analysis studies.

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The present study employed six thematic cards, five taken from the original TAT and one from the Michigan Picture Test series. These cards were used as a means for eliciting stores from Ss' from which their perceptions of their parents could be assessed. The cards included the following: Cards 7 BM, 8 BM, and 12 M (here and after referred to as Series A) for depicting the relationship between father-son figures; and cards 5, 6 BM, and 11 B (the last one from the Michigan Picture Test; here and after referred to as Series B) for depicting the relationship between mother-son figures.

The sensitivity of these cards as a means of demonstrating the relationships with one's parents has been shown by many investigators including Abt and Bellak (1959); Henry (1956); Morgan and Murray (1935), and Murray (1943). The following sections adopted from Abt and Bellak (1959) are quoted. (A more detailed description of individual cards may be found in Appendix A.)

(Series A--Father-Son Relationship)

Card 7 BM- This picture of an old man and a young man is indispensable in bringing out the father-son relationship and all its derivatives (in males) in the form of attitudes to male authority (p. 209).

Card 8 BM- This is a very useful picture. Usually male subjects identify with the boy in the foreground. The essential themes that may be developed are centered on either aggression--somebody was shot and is now being operated upon in the background--or upon stories of ambition--the dream of a boy to become a doctor, for example.

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The way in which the figures are described--for example, the attitude toward the doctor as an older person or toward the person being operated upon--if seen as a paternal figure, frequently gives clues as to the oedipal relationship (pp. 209-210).

Card 12 M- This is a most important picture for indicating the qualities of the relationship of a younger man to an older man particularly as regards to passive homosexual fears and fears of being under the domination of superior figures (p. 211).

(Series B--Mother-Son Relationships)

Card 5- A middle-aged woman looking through a half-open door is often interpreted as the mother who may be watching different activities--at times this becomes a symbolic story of fear of observed masturbation, or the mother figure appears as benevolently interested in how the child is, or she may be seen as reprimanding the subject for being up late (p. 208).

Card 6 BM- This is an indispensable picture for males reflecting all the problems of mother-son relationships and all their derivatives in relation to wives and other women. Oedipal themes are frequent. The stories given to this picture run such a complete range of this fundamental problem that only a monograph could do it justice (p. 209).

Card 11B is one of the 20 cards of the Michigan Picture Test series developed by the Michigan Department of Mental Health. This card shows a middle-aged woman standing at the threshold of a door facing a man in a uniform holding a young boy by hand. Themes involving policemen bringing a lost child or one who has gotten into trouble, to his mother are very common.

The first three cards (Series A) were used to obtain a measure of the individual's perception of the father figure with respect to the variables of warmth and saliency.

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The last three cards (Series B) were used to obtain a similar measure of the individual's perception of the mother figure. The method of scoring these cards is described later under Procedures.

(b) The MF Scale of the MMPI as a Measure of Role Preference

As a measure of masculine-feminine role preferences the MF scale of the MMPI seems to work well. Hathaway and McKinley who developed the MMPI state:

This scale (MF) measures the tendency towards masculinity or femininity of interest patterns; separate T scores are provided for the two sexes. In either case, a high score indicates a deviation of the basic interest pattern in the direction of the opposite sex. Males with very high MF scores have frequently been found to be either overt or repressed sexual inverts. (MMPI Manual, 1951; p. 20.)

The MMPI scales were developed by contrasting normal groups with carefully studied clinical cases. The sampling was fairly adequate for the ages of 16 to 55 for both sexes. Data for constructing and validating the MF scale was obtained from pre-college and college students also.

There is a vast literature concerning research on the MMPI as a measure of masculinity-femininity. These studies point out to the stability and the discriminatory power of the MF scale to distinguish between the two sexes (Burton, 1947; Carlos, 1954; De Cillis and Orbison, 1950; Granick and Smith, 1953; Grygier, 1957; Meehl, 1946; Pepper and Strong, 1958; and Sopchak, 1952).

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The content of the MMPI's MF scale is heterogeneous, ranging over interests in kinds of work, hobbies, pastimes, social activities, religious preferences, and family relationships. There are also items on fears, worries, and personal sensitivities. An important feature of this scale is the amount of frankly sexual material in its items.

The MF scale was used as a measure of the individual's preference for the culturally accepted masculine or feminine roles and behavioral patterns. High scores indicate preference for culturally accepted feminine roles, low scores for masculine roles.

(c) The Draw-A-Person Test

The Draw-A-Person test (DAP) as a projective technique has been used for a measure of sexual differentiation in a number of studies (e.g., Azimi, 1960; Bieliauskas, 1960; Butler and Marcus, 1959; Goodenough, 1950; Haworth and Normington, 1961; Knopf and Richards, 1952; Machover, 1954; Murphy, 1957; Normington, 1960; Rabin and Limuaco, 1959; Swensen, 1955; and Swensen and Newton, 1955). Comparison of the male and female figures yield a measure of sexual differentiation and discrimination.

C. Testing Procedure

The tests were administered in groups of 60 Ss' at a time in 2-1/2 hour sessions on two successive evenings according to the following plan:

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(a) All the Ss' were given three 8-1/2" by 11" blank sheets of paper together with the following mimeographed instructions which was also read aloud by the examiner:

You will shortly see a number of pictures on the screen. Please write a short story about each picture. Your story need not be very long, but must include the following points:

- a. What is going on?
- b. What led up to the situation?
- c. What is going to happen?
- d. How do the people (or the person) in the story feel (or feels)?

Please write your name on the first sheet. Start each story to a different card on a new sheet. Number your stories from one to six please.

After the instructions were fully understood, the thematic cards were projected on the screen in the following order, as suggested by Murray (1943): Cards 5, 6 BM, 7 BM, 8 BM, 12 M, and 11 B. Before projecting the cards on the screen, the examiner repeated the following additional instructions depending upon the nature of the relationship which he desired to focus on:

Imagine the scene involves a father-son (or mother-son) relationship. Write your story from this point of view.

Each card was exposed on the screen for two minutes. Ss' were not allowed to write while the card was projected on the screen. After the card was removed, Ss' were given five minutes to write the story according to the instructions. No questions were answered and no additional directions were given.

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When all six stories were completed, Ss' were instructed to clip their papers together and the examiner collected them.

(b) Each subject was next given two blank sheets of 8-1/2" by 11" white paper. The examiner also distributed a No. 2 pencil among the Ss' as an assurance that all drawings would be drawn by using a pencil. The following instructions were given orally by the examiner:

Please write your names in the upper hand corner of the sheet of paper. Under your name write number "One." I want you to draw a person. Please draw the whole person and do not draw a stick figure.

Ss' were allowed 15 minutes for the completion of the first drawing. Then the following directions were given orally by the examiner:

Please write number "Two" on the second page. Now draw a person of the opposite sex. That is, if you drew a male figure first, now draw a female figure. Please do not draw a stick figure.

Again 15 minutes were allowed for the completion of the second drawing. No questions were answered nor comments given by the examiner. At the end of 15 minutes, Ss' were asked to clip their drawings together and they were collected by the examiner.

(c) Finally, each subject was given an MMPI booklet together with a short questionnaire and an answer sheet. The purpose of the questionnaire was to obtain some information regarding the family structures of the Ss'

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(see Appendix C). The Ss' were instructed to fill out the questionnaire and then carefully to follow the instructions for answering the MMPI questions.

Ss' were informed that there was no time limit. They were asked to complete the short form of the MMPI (consisting of 366 items, instead of the original 566 items, but including all the items in the MF scale). After completing the test, each subject handed in his MMPI booklet and left the session.

During the test only questions concerning the manner of marking the answer sheets were answered. (Appendix C contains a complete copy of the testing instructions.)

D. Scoring

The following methods were used for quantifying the results:

(1) Thematic Stories

To rate each thematic story on the two variables of warmth and saliency, the author developed the following two coding scales:

(a) Rating Scale for Warmth:

This scale consists of five points extending from four to zero, the former being the upper end and the latter the lower end of the scale. Two is the mid-point. A story was rated and assigned four points if it demonstrated a



strong degree of warmth and closeness between the figures involved; three points if it indicated implications of warmth and closeness; two points if it conveyed average warmth and closeness; one point if it conveyed little or no warmth; and zero point if it clearly indicated hostility and animosity between the figures.

(b) Rating Scale for Saliency:

This scale also consists of five points extending from four to zero, the former being the upper end of the scale and the latter the lower with two representing the mid-point. A story was rated four points if it clearly indicated a strong involvement and interaction between the figures, either positive or negative; three points if the nature of the dominant relationship seemed to be implied; two points if the nature of the salient relationship was not beyond what would be expected from the stimulus material; one point if there were seeming indications of lack of a salient relationship and desire to become uninvolved; and zero point if it clearly indicated lack of role dominance and involvement together with an open attempt to remain distant, and unattached.

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- 7 points - good sexual differentiation
- 6 points - better than fair sexual differentiation
- 5 points - fair sexual differentiation
- 4 points - slightly poor sexual differentiation
- 3 points - poor sexual differentiation
- 2 points - little sexual differentiation
- 1 point - no sexual differentiation.

In scoring the drawings, attention was focused on the degree to which an individual's drawings differed in regard to sexual characteristics portrayed. The person's artistic talents and the way he had drawn the figures were not considered as part of the scoring criterion. Figure 1 presents the distribution of sexual differentiation scores on Swensen's five-point and nine-point scales.

E. Inter-Judge Agreements in Scoring

- (1) Reliability of Scoring for the Exploratory Study for the Thematic Stories

In order to test the applicability of the author's two scales for the variables of warmth and saliency and to establish reliability agreements, an initial exploratory study using 19 male students aged 18 to 19 years was made according to the above procedures. Two judges* rated the

*Mr. Leif Terdal, an advanced graduate student at the Department of Psychology, Michigan State University, and the author.

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Number of Subjects Obtaining Similar Scoring Points

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Figure 1.

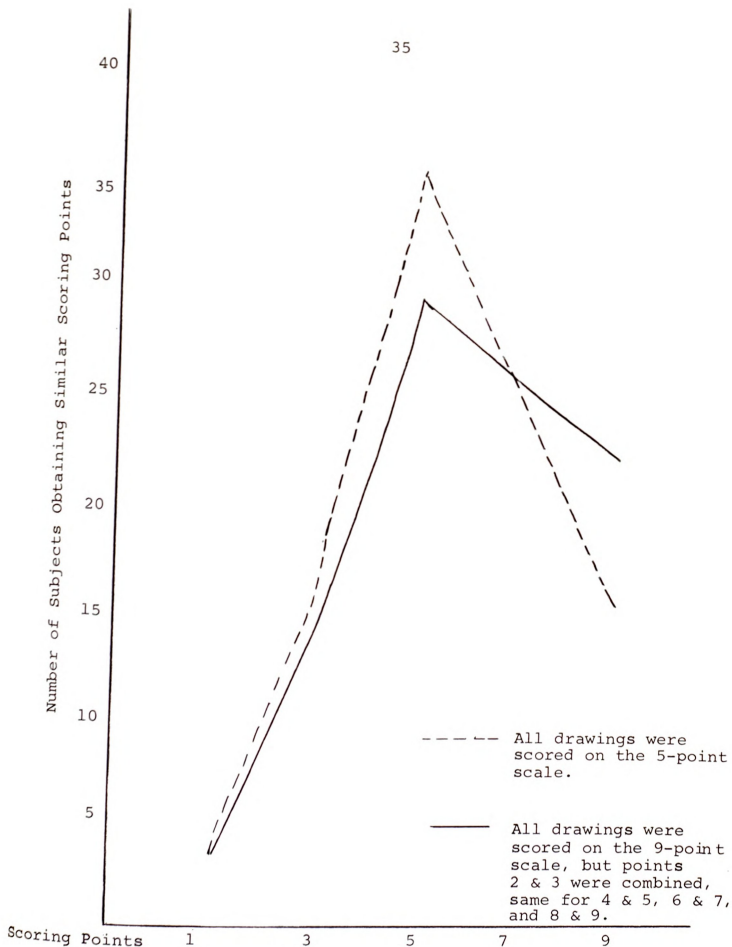


Figure 1. Distribution of sexual differentiation scores on Swensen's five-point and nine-point scales.

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stories given by these 19 subjects on the two scales. Prior to rating, common rating criteria were established between the two judges. Although the main hypotheses of this study were not discussed, the scoring scales were fully discussed and each scoring point together with an illustrative example was brought to the attention of the judges.

Tables 1 and 2 present the inter-judge product moment correlations for warmth and saliency respectively in this exploratory study for each of the six cards.

(2) Reliability of Scoring for the Present Study for the Thematic Stories Based on 34 Protocols

For the purposes of studying reliability of agreements in scoring the thematic stories for warmth and saliency, it was decided that every third protocol should be scored independently by three judges.* Thus 34 protocols were scored and the inter-judge correlations for them determined. Each judge was well-informed in regards to the scales. The decision to score every third protocol instead of all 100 protocols for inter-judge agreement was made because of excessive time demands on cooperating judges.

*The three judges who scored every third protocol include:

- Judge 1: Mr. Leif Terdal, an advanced graduate student in Clinical Psychology in the Department of Psychology, M.S.U.
- Judge 2: The author.
- Judge 3: Dr. Joan Brady, 4th year Psychiatric Resident at Lafayette Clinic, Detroit, Michigan.

Table 1. I

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Table 2. I

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Table 1. Inter-judge correlation for warmth.

Card	Product Moment (r)	df	p
7 BM	.91	18	.001
8 BM	.63	18	.005
12 M	.88	18	.001
6 BM	.82	18	.001
5	.67	18	.005
11 B	.68	18	.005

Table 2. Inter-judge correlation for saliency.

Card	Product Moment (r)	df	p
7 BM	.84	18	.001
8 BM	.66	18	.005
12 M	.77	18	.001
6 BM	.76	18	.001
5	.60	18	.005
11 B	.85	18	.001

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A program was written for computer analysis of the inter-judge agreements.* The data were punched on IBM cards and intercorrelations between pertinent variables were calculated by the M.S.U.'s CDC 3600 computer.

Tables 3 and 4 present the intercorrelations of the three judges on warmth for the Series A cards which depict the father-son relationships and for the Series B cards depicting the mother-son relationships. Tables 5 and 6 similarly present the intercorrelations for the three judges on the variable of saliency for the two sets of cards. For a full analysis of intercorrelations between the three judges on each individual card in the two series, see Appendix F.

(3) Inter-Judge Agreement on Sexual Differentiation

In order to establish inter-judge reliability agreements on Swensen's nine-point scale for sexual differentiation, two independent judges (Judge 1 and Judge 2) rated every third set of drawings of the original 100 protocols, 34 sets in all. A product moment correlation coefficient of .93 between the two judges obtained, this being significant beyond .001 level. Swensen, the originator of the scale, reports a reliability coefficient of .84 between two independent judges on a very large sample (1955). Other

*Special thanks are extended to Mr. James DeJong from the Department of Psychology who formulated the entire program for the analysis of the present data.

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Table 3. Intercorrelations for three judges for warmth
(Series A: father-son relationships); N = 34.

Judges	Product Moment (r)	df	p
1 and 2	.8252	33	.001
1 and 3	.7399	33	.001
2 and 3	.8106	33	.001

Table 4. Intercorrelations for three judges for warmth
(Series B: mother-son relationships); N = 34.

Judges	Product Moment (r)	df	p
1 and 2	.7579	33	.001
1 and 3	.7121	33	.001
2 and 3	.8419	33	.001

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Table 5. Intercorrelations for three judges for saliency
(Series A: father-son relationships); N = 34.

Judges	Product Moment (r)	df	p
1 and 2	.8095	33	.001
1 and 3	.6175	33	.001
2 and 3	.7076	33	.001

Table 6. Intercorrelations for three judges for saliency
(Series B: mother-son relationships); N = 34.

Judges	Product Moment (r)	df	p
1 and 2	.8064	33	.001
1 and 3	.7702	33	.001
2 and 3	.8348	33	.001

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recent studies (including Azimi, 1960, and Rabin and Limuaco, 1959) likewise report significant reliability coefficients.

F. Preparation of Data for Statistical Analysis

For purposes of computer analysis IBM cards were prepared containing the following information for each subject: identification number, the score on each of the six thematic cards on warmth and on saliency, score assigned to the drawings for sexual differentiation on nine-point and also on five-point scale, the MF score, the total scores for each set of three cards, Series A and Series B on warmth and on saliency. With the aid of the M.S.U. CDC 3600 computer, the intercorrelations between these variables were calculated, yielding a 19 x 19 square matrix.

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VI. RESULTS

A. Analysis of Results Pertaining to Perception of Warmth and Saliency in the Parents-son Relationships and the Masculine-feminine Role Preference

Table 7 presents the intercorrelations between the two variables of warmth and saliency in the cards in Series A and B, on one hand, and the masculinity-femininity dimension on the other.

Table 7. Intercorrelation matrix for warmth, saliency and masculinity-femininity (N = 100).

		Warmth		Saliency	
	MF	Series A (Father-Son)	Series B (Mother-Son)	Series A (Father-Son)	Series B (Mother-Son)
MF					
Series A (warmth)	-.7001*				
Series B (warmth)	.7271	-.4706			
Series A (saliency)	-.7597	.8416	-.5407		
Series B (saliency)	.7863	-.5582	.8298	-.6042	

*All the correlation coefficients reported in this table are significant beyond .001 level.

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According to the above table, a highly significant negative correlation ($-.7001$) was obtained between preference for culturally feminine roles and behavioral patterns and perception of warm father-son relationships towards the three cards in the Series A. Thus, Hypothesis I, which states that a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the projection of warm father-son relationships in the thematic stories exists, is supported.

Hypothesis II states that a positive relationship between the preference for culturally accepted feminine roles and behavioral patterns and the projection of warm mother-son relationships in the thematic stories exists. The data presented in Table 7 serves to sustain this hypothesis also. The correlation coefficient of $.7271$ between preference for culturally accepted feminine roles (MF scale) and the perception of warm mother-son relationships in the three cards of the Series B is highly significant.

With respect to the variable of saliency, Table 7 presents a correlation coefficient of $-.7597$ which is highly significant between the MF scale and the three cards in Series A depicting the father-son relationships. The finding serves to support Hypothesis III which states that a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the projection of salient father-son relationships in the thematic stories exists.

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Likewise, the significant correlation coefficient of .7863 obtained between the MF scale and the three cards in Series B in regards to the variable of saliency supports Hypothesis IV. This hypothesis states that there is a positive relationship between the preference for culturally accepted feminine roles and behavioral patterns and the projection of salient mother-son relationships in the thematic stories.

B. Analysis of Results Pertaining to Sexual Differentiation and Masculine-feminine Role Preference

Table 8 presents the intercorrelation matrix between the scores of sexual differentiation both on the nine-point and the five-point scales and the masculinity-femininity dimension (the MF scale). Data pertaining to the relationship between sexual differentiation and the two variables of warmth and saliency are also shown in the same table.

Table 8. Correlations of scores on sexual differentiation with the MF scale and warmth and saliency (N = 100).

		Warmth		Saliency	
	MF Scale	Series A	Series B	Series A	Series B
Sexual Dif. (9-point Scale)	.0856*	.0125	-.0410	-.0259	-.0487
Sexual Dif. (5-point Scale)	.0309	.0521	-.0870	-.0286	-.0816

*None of the correlation coefficients presented in this table is significant.

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None of the correlation coefficients between the MF scale and the scores for sexual differentiation on either the nine-point and the five-point scales were significant. Thus Hypothesis V which states that a positive relationship between the preference for culturally accepted masculine roles and behavioral patterns and the display of sexual differentiation in the human figure drawings exists is not supported.

Likewise, no significant relationship between the scores on sexual differentiation and the perception of either warm or salient relationships in the thematic cards was obtained.

C. Analysis of Results Pertaining to the Relationships of Warmth and Saliency with Respect to the Masculinity-femininity Dimension

Table 9 presents the test of significance between the means for the variables of warmth and saliency with respect to the masculinity-femininity dimension. The High MF group refers to those individuals who obtained a score of 30 or more on the MF scale which according to the MMPI authors (Hathaway, 1951) is indicative of preference for feminine roles. The Low MF group refers to the individuals who obtained a score of 29 or less on the MF scale, presumably indicating preference for masculine roles.

Table 9.

Saliency (Mother- Son)	Warmth (Mother- Son)	Saliency (Father- Son)	Warmth (Father- Son)
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Table 9. Test of significance between means for the variables of warmth and saliency with respect to the MF scores.

	Groups	N	M	s ²	t	p*
Warmth (Father-Son)	High MF	35	5.17	3.2	7.17	.001
	Low MF	65	8.04	4.8		
Saliency (Father-Son)	High MF	35	5.05	2.11	9.26	.001
	Low MF	65	8.20	4.34		
Warmth (Mother-Son)	High MF	35	8.34	4.05	7.08	.001
	Low MF	65	5.15	6.44		
Saliency (Mother-Son)	High MF	35	9.45	1.68	10.45	.001
	Low MF	65	5.27	7.37		

*One-tailed test.

The data presented in the above table shows in a different way what was brought forth in Table 7 in the correlation coefficients obtained among the same variables; masculine role preferring males project significantly warmer and more salient father-son relationships in their thematic stories, while the feminine role preferring males project significantly warmer and more salient mother-son relationships in their thematic stories.

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Table 9 also points out that apparently the variables of warmth and saliency play about equally important parts in the development of masculine or feminine role preference and behavioral patterns in the young adult males. Furthermore, the partial correlation coefficient between the MF scores and the scores for the variable of warmth in the father-son relationships (partialing out saliency) on one hand, and the partial correlation coefficient between the MF scores and the scores for the variable of saliency in the father-son relationships (partialing out warmth) on the other, revealed no significant differences and pointed out further that both warmth and saliency contribute equally in the development of masculine roles.

The same analysis computed between the MF scores and the scores for the variables of warmth and saliency in the mother-son relationships revealed no significant difference and again showed that both warmth and saliency seem to contribute equally in the development of feminine roles.

D. Analysis of Results for Individual Cards
for the Variables of Warmth and Saliency

Table 10 shows the intercorrelation matrix among the individual cards for warmth and saliency. The following points are demonstrated by the data in this table:

1. Cards 7 BM, 8 BM, and 12 M in Series A significantly correlate with each other in yielding the variables



Table 10. Intercorrelation matrix among the individual cards in Series A and B (N = 100).

		Ratings of Warmth					11B
	7BM	8BM	12M	6BM	5		
Rating of Warmth							
7BM							
8 BM	.3375***						
12 M	.2027*	.3739***					
6 BM	-.4631***	-.3182***	-.2371**				
5	-.2671***	-.2666***	-.1251	.5885***			
11 B	-.3648***	-.2710***	-.2470**	.4356***	.5302***		
Ratings of Saliency							
7 BM	.7207***	.3231***	.1678*	-.4120***	-.4077***	-.3820***	
8 BM	.3974***	.8089***	.4734***	-.3618***	-.3030***	-.3491***	
12 M	.2892***	.4508***	.6574***	-.2326**	-.2224*	-.4266***	
6 BM	-.4432***	-.3011***	-.2364**	.7172***	.6254***	.4853***	
5	-.3909***	-.2199*	-.2535**	.6170***	.6280***	.4704***	
11 B	-.5613***	-.3089***	-.3343***	.5644***	.4283***	.6357***	

*Significant at .05 level.

**Significant at .01 level.

***Significant at .005 level.

Cards

Ratings of Saliency

11B	7BM	8BM	12M	6BM	5	11B
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-.3820***

-.3491*** .3867***

-.4266*** .2556** .5284***

.4853*** -.4637*** -.4220*** -.2579**

.4704*** -.3814*** -.3190*** -.2820*** .6282***

.6357*** -.5028*** -.4215*** -.4415*** .4721*** .5964***

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2. Likewise, cards 6 BM, 5, and 11 B in Series B significantly correlate with each other in yielding the variables of warmth and saliency in the mother-son relationships.
3. The individual cards in each series significantly correlate with each other in yielding the variables of warmth and saliency, raising the possibility that they might be the same variable under two different names and measuring the same thing.
4. In the same vein, Table 10 indicates that the correlation of warmth-warmth on different cards is of the same magnitude as the correlation of warmth-saliency, thus giving no indication of their independence.
5. The individual cards in Series A correlate negatively (and yet significantly) with the individual cards in Series B involving the variables of warmth and saliency in the father-son or mother-son relationships.

E. Test of Reliability of the
Thematic Cards as an Instrument

As a measure of the reliability of the warmth and saliency scores, the Spearman-Brown formula was applied to the average intercorrelations presented in Table 10 for the

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Table 11.

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three cards in each series. Table 11 demonstrates these reliability coefficients.*

Table 11. Reliability of the thematic cards as an instrument for the variables of warmth and saliency.

Card	Variable	Reliability Coefficient
Series A (Father-Son Relationship)	warmth	.55
Series B (Mother-Son Relationship)	warmth	.74
Series A (Father-Son Relationship)	saliency	.65
Series B (Mother-Son Relationship)	saliency	.79

*The procedure was as follows:

$$\text{reliability} = \frac{n (\text{average } r)}{1 + (n-1) (\text{average } r)} . \quad \text{Thus for the}$$

the three cards in Series A scored on warmth, the following correlations were substituted:

$$\text{reliability} = \frac{\frac{3(.3375 + .2027 + .3739)}{3}}{1 + 2 \frac{(.3375 + .2027 + .3739)}{3}} = .55$$

For further reference, see Guilford (1954, p. 354).

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VII. DISCUSSION

The analysis of the data presented in the previous section served to support the first four hypotheses but not the fifth one. The findings are summarized as follows:

1. It was found that a significant positive relationship between preference for masculine roles and behavioral patterns, and the projection of warmth in the father-son relationships, existed in the stories given to the thematic pictures by the young adult subjects.
2. Likewise, a significant positive relationship between preference for masculine roles and behavioral patterns and the projection of salient father-son relationships in the stories given to the thematic pictures by young adult males was demonstrated.
3. A significant positive relationship between the preference for culturally accepted feminine roles and behavioral patterns and the projection of warm mother-son relationships in the thematic stories given by the young adult male subjects was obtained.
4. Likewise, a significant relationship in the positive direction was found between the preference for culturally accepted feminine roles and behavioral patterns and the projection of salient mother-son

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relationships in the thematic stories given by the young male subjects.

5. Finally, it was noted that sexual differentiation scores from a set of drawings produced by young adult males had no significant relationships to preference for masculine or feminine roles and behavioral patterns. Also, no significant relations were found between sexual differentiation and the other variables included in the study, warmth and saliency of father-son and mother-son relationships.

The above findings will be discussed from different views in the following paragraphs to assess their implications.

A. Theoretical Considerations

The present study gives general support to the theories of identification. The psychoanalytic theory of identification, and Mowrer's (1950) subsequent formulations within the context of the learning theory, state that the young boy identifies with the parent who is seen as the primary source of reward. If perception of warmth in the mother-son relationships is taken as a result of stronger rewards accorded to the child by the mother, it can be stated that the males who prefer feminine roles identify more closely with their mothers than their fathers. Likewise, since the masculine role preferring males projected warmer relationships in the father-son situations, they may be

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said to have been rewarded more strongly by their fathers, thus have identified with the paternal figure.

Similarly, the role theory of identification (Sarbin, 1954) which states that the child identifies with that parent who is seen as having a more dominant or salient role in the family situation, is likewise supported. If the projection of saliency in the father-son relationships can be taken as a measure of role dominance and saliency, it can be then stated that the masculine role preferring males are the ones who have identified with the paternal figures and the males who prefer feminine roles the ones who have identified with the maternal figures.

Furthermore, Sears, Maccoby and Levin's statement (1957) made within the context of the psychoanalytic theory to the effect that the boy must shift from feminine to masculine identification sometime in his early years if he is to develop masculine personality seems to be supported. The feminine role preferring males who significantly perceived warmer and more salient relationships in the mother-son situations seem not to have been able to make the transition set forth by the analytic theory for the development of masculine identification while the masculine role preferring males have been able to make this transition.

The data in no way indicate or give evidence concerning the relative effectiveness of the role dominance or reward upon the development of masculine or feminine role

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preference. Both warmth and saliency appear to contribute equally to the development of role preference (see Table 7).

B. Relation of Present Findings to Previous Studies

The findings of the present study regarding warmth and saliency are congruent with what has been reported in the literature in connection with other studies. Mussen and Distler's findings (1959) to the effect that young boys with strong masculine role identification perceive their fathers as more rewarding and nurturant in comparison with their weakly identified peers are supported. Seward's (1946) clinical observations that boys who prefer their mothers (i.e., see them as more rewarding and more affectionate) during their childhood are not likely to shift their identifications to their fathers are also supported. Likewise, Payne and Mussen's (1956) findings in connection with high father identification and perception of father as a highly rewarding and affectionate person are also sustained.

In contrast, the drawings as a measure of sexual differentiation did not correlate with the masculinity-femininity dimension and perception of warmth and saliency in the parental relationships. In this respect the findings are not congruent with some of the studies reported in the literature (e.g., Azimi, 1960; Rabin and Limuaco, 1959). Swensen's nine-point scale (1955) was found to be equally sensitive as his original five-point scale.

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There appear to be several reasons for the lack of a significant relationship between role preference and sexual differentiation as revealed in the drawings. The previous studies reporting significant findings with this scale concern themselves with children with an age range between 10-12 years, while the present study was with an entirely different age group. It would appear that adults are fully aware of sex differences, so that individual differences in sexual differentiation are small. Hence, children's drawings may be significantly more valuable when compared with each other for a measure of sexual differentiation than those produced by adults. Since very few studies have been conducted with adult samples and the bulk of the studies reported (e.g., Bieliauskas, 1960; Murphy, 1957; and Normington, 1960) concern themselves with children, it is highly probable that Swensen's scale for sexual differentiation, although originally designed on the basis of the drawings obtained from an adult population, has much less sensitivity at the adult level than with a younger group. Finally, it may be that young adult males are much less observant, careful, and diligent when they are asked to draw a set of human figures while children pay more attention and care to such a task. The presence of a number of comical, cartoonish, and hastily-drawn figures in the drawings obtained in this study seem to corroborate the final point.

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C. Comments on the Variables of Warmth and Saliency

As reported under results, the variables of warmth and saliency revealed in the father-son or mother-son relationships were found to correlate significantly with each other. Young adult males preferring masculine roles projected warmth and saliency in their thematic stories concerning the father-son relationships to an equal degree. Likewise, young adult males preferring feminine roles projected warmth and saliency in their stories concerning the mother-son relationships to an equal degree. In short, the high correlation found between the two variables of warmth and saliency raises the question that these two might be the same, or measuring the same thing.

The author by no means rejects the inter-dependency of these two variables, since the presence of a warm relationship accompanies a salient relationship as well. At the same time he believes that they are two separate concepts. It is true that they are highly correlated, but to conclude that because of this they are the same seems erroneous due to the following reasons:

For one thing, the variable of warmth indicates the degree of closeness, love and affection which was demonstrated in the thematic stories between the two figures. The variable of saliency, on the other hand, indicates the degree of role involvement, the impact of one's influence

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on the role and behavioral patterns exhibited by the other, and the importance and dominance of the role played by the father or the mother in the family life and in the life of the son. In this light, the two variables indicate different aspects of the parent-son interactions and tap different entities.

Furthermore, it is perfectly possible for the young men to view their fathers as warm persons and at the same time perceive them as having dominant roles in the family situation. Likewise, it is quite plausible for the young men to see their mothers as warm persons and at the same time having dominant roles. In fact this is exactly what was found to be the case. Therefore, the high correlation between the variables of warmth and saliency can be explained in terms of the individual's simultaneous perception of these two variables in the father-son or mother-son relationships.

An analogy to illustrate the above point is in order. The two concepts of love and respect are chosen as examples. The author believes that these two concepts are two separate entities and convey different feelings. However, at the same time, the feelings conveyed by them in regard to a parental figure may be inter-dependent. Should a high correlation be obtained between the variables of love and respect in a hypothetical study, it cannot be concluded that love and respect are the same or two different names for the same concept, since it is highly possible that an

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individual may both love his father and at the same time respect him.

Nevertheless, the above logical discussion does not in any way serve to deny the high correlations obtained between the variables of warmth and saliency between the cards. A reference to Table 10 demonstrates that the correlation of warmth-warmth on different cards is of the same magnitude as the correlation of warmth-saliency. For instance cards 7 BM and 8 BM display a correlation coefficient of .3375 on the variable of warmth versus warmth and .3974 on the variables of warmth versus saliency, both of which are significant beyond the .005 level. The same relationship is true for other cards. Warmth and saliency thus appear to be the same or at least measuring the same thing. The following comments may serve to explain some of the reasons involved:

The theoretical issues concerning the question of identification are somewhat unclear in respect with making a clear-cut distinction between the importance of reward and punishment on one hand and role involvement, on the other. For instance, Sarbin in connection with his proposal for role theory states:

Early in life, a child is taught acts which are differentiated for example according to sex. Little boys are rewarded or punished for certain kinds of actions. . . . thus begins the acquisition of actions for the later performance of one's generalized sex role. (Sarbin, 1954; p. 226.)

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It seems then that the effects of reward and punishment are crucial in the acquisition of a certain role. This may be one reason for the high correlations between warmth which parallels reward and saliency which parallels role involvement. Likewise, Mowrer who takes the stand for the learning theory does not deny the importance of the parental role in the household and incorporates this factor in his proposal of "defensive identification" (1950). Since the data supporting the present hypotheses is in keeping with the theoretical assumptions made by these authorities, and since the theories themselves fail to make a clear-cut distinction between the two processes, the empirical high correlations obtained between warmth and saliency is reasonable.

Furthermore, despite the high inter-judge correlations on the question of agreement regarding warmth and saliency, it may be that the two scales are actually measuring the same factor and are not as clearly differentiated as they were initially thought to be.

D. Comments on the Stories and Drawings Given by Ss'

A detailed discussion of the nature of stories given to each thematic card merits special consideration. A review of the types of plots related in these stories is also of interest. Before this attempt is made, however, it should be stated that the five TAT cards and the one chosen from the Michigan Picture Test served as a sensitive

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instrument in the present study. Under the specific directions, the analysis of the stories given to these cards yielded variables of warmth and saliency which were reliably rated by three independent judges on the two five-point scales devised by the author. Once more the TAT cards demonstrated their value and worth in bringing out and projecting the individual's needs, feelings, and desires in connection with the assumptions set forth by the projective hypothesis. Most of all, one of the main contributions of this study rests upon the empirical support of Henry's (1956) description of the latent stimulus demands and the frequent plots given to these stories. It was shown that ratings can yield reliable measures of the stimulus contents of the cards.

Card 7 BM generally depicted a situation in which the older man was seen as giving advice, or counsel to the younger man. The latter appeared to be the one facing a problem or difficulty and seeking the help of the former. Plots involving the elderly man in need of the younger man's help were extremely rare. This card proved to be indispensable in depicting a wide variety of plots in connection with the father-son relationships.

Card 8 BM usually depicted scenes in which the father figure was seen as a doctor operating on a patient, mostly under primitive conditions and the young boy in the foreground as the son who wished to identify with the father,

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i.e., become a surgeon like him. Another frequent plot given to this card involved a situation wherein the father was shot either accidentally or intentionally by the young son while the doctors were taking out the bullets. Other plots involving reveries, dreams, and scenes from the civil wars were occasionally given to this card. In general this card appeared to be sensitive in bringing out hostile and negative feelings towards the father figure.

Card 12 M is of special interest. The usual plot given was a son who had been taken ill or was tired from the day's work and the father checking to see if he was asleep. However, a vast variety of other plots were given to this card. In some stories the leaning man was seen as the father figure who was about to do "something" to the boy while he was asleep. The nature of his action ranged from acts involving hypnosis to murder and in one or two plots reference to homosexual attacks by the father were also mentioned. Mystical stories demonstrating the father's power of healing the physical and mental illnesses afflicting his son were also mentioned.

Card 6 BM was nearly always seen as a situation wherein the young man referred to as the son was giving some information to the older woman referred to as the mother. The nature of the information or discussion was vast and varied including topics concerning the son's marriage and the mother's disapproval, the father's death and experience

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of grief by both mother and son, and strong Oedipal attachments. Extreme closeness and warmth on one hand and blatant hostility and rejection on the other with indifference in between colored the tones of the stories. The card proved itself valuable in demonstrating the individual's feelings toward the mother figures and the projection of the affect in connection with such interactions.

Card 5 in which there is actually only one person present (unlike the rest of the cards) appeared to be equally sensitive in bringing forth different situations between the mother and son figures. The usual plot involved a scene wherein the mother upon hearing voices in the son's room witnessed the son in bed with a girl-friend or another woman in sexual intercourse. Some stories demonstrated embarrassment and guilt, but the majority of the themes stated that the mother was understanding of the boy's needs and tolerant of the situation. Other plots involving scenes of masturbatory activities were equally frequent. Occasionally the mother figure was seen as calling the son for an errand, checking on him to see if he was doing his homework, and wanting to say good-night before going to sleep. By and large the sexual themes given to this card over-powered other plots and were the most frequent ones.

Card 11 B originally chosen from the Michigan Picture Test series appeared to be sensitive in depicting scenes regarding a mother-son relationship. The frequent

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plot given to this card involved a young boy who had been in some sort of difficulty such as truancy, breaking windows, etc., and was being brought home by a policeman. The reactions given by the mother figure ranged from extreme concern to lack of care in respect to the boy's welfare. Themes involving punishment especially in the stories where some difficulty with the law was expressed were frequent. Occasional plots concerned a boy who had been lost and was brought home by an agent of authority. In such themes, the mother figure was seen as being more of a benevolent person rather than a punishing agent. By and large the card proved effective in bringing out the maternal role and hostile feelings in the mother-son relationships.

The types of stories given to the same cards by the masculine role preferring males and the feminine role preferring males were significantly different. The statistical analysis of the data presented in Table 10 illustrates significant negative correlation coefficients between perception and warmth in the mother-son cards and perception and warmth in the father-son cards for the feminine role preferring males. It seems as if perceiving the mother as a warm and kind person for these individuals necessitated expressing indifference, animosity, coldness, and hostility towards the father figure. The same situation was true for the masculine role preferring males, although to a lesser degree (see Table 10).

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Likewise, the significant negative correlation coefficients found between perception of saliency in the mother-son situations and perception of saliency in the father-son situations demonstrated the same principles, i.e., when the mother was seen as a salient and dominant person, the father was viewed as a weak, submissive, and ineffective individual or when the father was seen as a salient and dominant person, the mother was seen as a submissive, weak and obedient person.

The above findings can be summarized as follows:

1. The young males who preferred masculine roles generally gave stories which involved a warm father-son interaction. The son was either the admirer, the advice-seeker or the friend of the father. The father likewise was the advisor, the model for identification, and the rewarder. His role was seen as being the head of the household, the "boss," and the primary source of reward and punishment.
2. The masculine role preferring males viewed their mothers in a rather cold light. This probably accounts for the significant negative correlations obtained between perception of warmth in the father-son cards and warmth in the mother-son cards. The mother figure was primarily seen as a person who opposed the son's marriage, who was only "there" to consult with, but whose advice was often rejected.

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She was seen as a person who witnessed sexual activities, but was either tolerant or non-committal. It appeared that the love and affection that should have been accorded to the mother figure was displaced on a girl-friend, or a fiancé with strong overtones of sexual activities implied or expressed. In a way it was paradoxical that although the female figure appeared cold to these masculine role preferring males, they made every effort to marry her or to have sexual relations with her.

3. The young males preferring feminine roles, on the other hand, viewed their mothers as the primary source of reward and punishment. In some cases the degree of affection expressed towards this figure was exceptionally strong and conveyed unresolved Oedipal feelings. For these individuals, the mother was the "boss" in the household and executed the salient role. In these stories the mother viewed the son as someone whom she wanted to take care of and protect, to give love and affection, and to discipline for his welfare. She was seen as being interested in her son's school activities and progress. Even when the issue of marriage was discussed, the son appeared to be grateful to his mother for her advice and always tended to take it into consideration.

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4. The feminine role preferring males viewed their fathers as hostile, aggressive, and uninterested individuals. This factor accounts for the significant negative correlations obtained between the mother-son and father-son relationships involving the warmth and saliency variables. Whereas the mother was the protector, the father was seen as the tyrant, the murderer, and the one who harmed the son. Likewise, while the mother was viewed as the one who demonstrated long range interests towards the development and the growth of the son, the father was seen as disinterested, uninvolved, indifferent, and ineffective.
5. Although the issue of artistic talent was completely disregarded in scoring the drawings on Swensen's sexual differentiation scales, in general it appeared that the feminine role preferring males produced more artistically superior drawings than the masculine role preferring males. The nature of the drawings produced by the former group conveyed a specific feminine quality. Some of these drawings were clearly indicative of homosexual tendencies and desires. The drawings made by the masculine role preferring males, on the other hand, appeared to be more masculine in nature and less attractive from the artistic point of view. Since such issues were

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not under consideration in the present study, a full analysis was not conducted in regard with the drawings.

By and large the analysis of the data pertaining to the masculine role preferring males has been of more interest and speculation. The extent to which they viewed the maternal figure as a cold and somewhat unaffectionate person while the paternal figure was seen in an entirely different light merits further attention. As an explanation, it is believed that these young adult males are in a certain period of life which necessitates defending against the demonstration of love and affection towards the mother figure. It seems that perception of warmth in the father-son relationships is less threatening than in the mother-son interactions, hence the need to assume the defensive role becomes apparent. It may be that if the same group of masculine role preferring males were tested several years from now a rather different picture with more warmth expressed towards the mother might be obtained. Likewise, there is no reason to assume that these males have not enjoyed a warm and loving mother as a child, since the process of adequate psychosexual development necessitates the presence of a warm and affectionate mother figure. More research with the same age range (probably of a longitudinal nature) can serve to demonstrate the underlying dynamics for the defensiveness displayed with respect to the demonstration of positive effect in the mother-son relationships.

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VIII. SUMMARY AND CONCLUSIONS

The general purpose of the present study was to test the assumption that an individual's perception of his parents as projected in his stories to a set of thematic pictures, would be significantly related to his preference for specific roles and behavioral patterns.

Subjects were 100 male students at Michigan State University during the Winter Term 1964 whose ages were between 18 to 21. They were asked to write short stories to six pictures, five of which were adopted from the Thematic Apperception Test and the sixth one from the Michigan Picture Test. The pictures were projected on the screen for two minutes and the subjects were allowed five minutes to write each story. They were instructed to imagine a father-son relationship in three of the cards (Cards 7 BM, 8 BM, and 12 M) and a mother-son relationship in the other three cards (Cards 6 BM, 5, and 11 B). In addition, they were given the standard TAT instructions.

Upon the completion of the stories, Ss' were given the Draw-A-Person Test and completed the short form of the Minnesota Multiphasic Personality Inventory which included the masculinity-femininity scale.

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The stories were then rated on two five-point scales of warmth and saliency. The MMPI profiles were scored for the masculinity-femininity scale. Each set of drawings was scored on Swensen's five-point and nine-point scales of sexual differentiation. The data were analyzed by a CDC 3600 computer at M.S.U. Correlation coefficients among the ratings of warmth and saliency in the stories, degree of sexual differentiation, and the masculinity-femininity scores were computed. The results supported the following four of five initially proposed predictions.

1. A significant positive correlation was found between the preference for culturally accepted masculine roles and behavioral patterns and the projection of warm father-son relationships in the thematic stories given by young adult males.
2. A significant positive correlation was found between the preference for culturally accepted feminine roles and behavioral patterns and the projection of warm mother-son relationships in the thematic stories given by young adult males.
3. A significant positive correlation was found between the preference for culturally accepted masculine roles and behavioral patterns and the projection of salient father-son relationships in the thematic stories given by young adult males.

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4. A significant positive correlation was found between the preference for culturally accepted feminine roles and behavioral patterns and the projection of salient mother-son relationships in the thematic stories given by young adult males. The data did not support the fifth initially proposed prediction.

5. No significant correlation was found between the scores on the MF scale and the measures of sexual differentiation as shown by the drawings.

The results were discussed within the framework of the theories of identification. It was concluded that both warmth and saliency contributed to the development of masculine or feminine interest patterns. Moreover, the high correlations between the ratings on warmth and saliency show a very high degree of communality in these two variables.

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APPENDICES

- A. Description of the Thematic Apperception Cards
- B. The MF Scale of the Minnesota Multiphasic Personality
Inventory
- C. Testing Instructions
- D. Swensen's Scale for Sexual Differentiation
- E. Coding Manual for Rating the Thematic Stories
 - Part I: Rating Scale for the Variable of Warmth
 - Part II: Rating Scale for the Variable of Saliency
- F. Inter-Judge Reliability Correlations for the Variables
of Warmth and Saliency.

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Card 6 E

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Card 7

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APPENDIX A

Description of the Thematic Apperception Cards*

Card 6 BM

- I. Murray's Description--A short elderly woman stands with her back turned to a tall young man. The latter is looking downward with a perplexed expression.
- II. Latent Stimulus Demand--This card deals with most generally the attitudes of the subject toward maternal figures and particularly toward separation or discord in that relationship.
- III. Frequent Plots--The most frequent plot to the picture present the man as the son who is either leaving or presenting sad news to the woman seen as mother.

Card 7 BM

- I. Murray's Description--A gray-haired man is looking at a younger man who is sullenly staring into space.
- II. Latent Stimulus Demand--This is a card dealing with hierarchical personal relations, normally taking the form of younger and less experienced versus older and more experienced. It is particularly stimulating of attitudes towards authority and towards the influences of external demands. More specifically in younger subjects the older man becomes a parental figure and images of the father are stimulated.
- III. Frequent Plots--The plot to the story follow closely the latent stimulus, taking the form most frequently of a father-son or of a professional relationship. In any formula, the older is most frequently advising the younger.

*Adopted from Henry, W. E. (1956), pp. 245-254.

Card 8 B

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Card 12

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Card 8 BM

- I. Murray's Description--An adolescent boy looks straight out of the picture. The barrel of a rifle is visible at one side and in the back-ground is the dim scene of a surgical operation, like a reverie-image.
- II. Latent Stimulus Demand--This picture is a stimulus test of the subject's reality orientation as well as of his ambition and future planning skills. Secondarily, it permits hostile and attacking fantasies to emerge.
- III. Frequent Plots--The surgical plot is more frequent in which the boy is seen as dreaming or imagining the background scene. Most frequently this relates to his ambitions or future career plans. Frequently the scene is reversed and the boy becomes the image in the mind of a doctor, usually as thinking of his son who also becomes a physician.

Card 12 M

- I. Murray's Description--A young man is lying on a couch with his eyes closed. Leaning over him is the gaunt form of an elderly man, his hand stretched out above the face of the reclining figure.
- II. Latent Stimulus Demand--The relation of the potentially passive and dependent to some superior uncontrollable force is the basic emotional stimulus here. It will reflect the subject's passivity, his attitude towards a controlling force, and potentially, in some subjects homosexual concerns.
- III. Frequent Plots--Plots of hypnotism, illness of the young man, or some religious rite are frequent here. In these the older man will be the hypnotist or the minister or the doctor.

Card 5

- I. Murray's Description--A middle-aged woman is standing of the threshold of a half-opened door looking into a room.
- II. Latent Stimulus Demand--This is a picture especially likely to portray attitudes towards the maternal figure, especially when seen as prohibitive and supervisory.

Card 11

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Card 11 B

This card is one of the 20 cards which comprise the Michigan Picture Test developed by the Michigan Department of Mental Health. The Michigan Picture Test is a projective personality test based on previous work done with the Thematic Apperception Test.

Card 11 B demonstrates a middle-aged woman standing at the threshold of the door facing a man in a uniform holding a young boy by hand. Themes involving a policeman bringing a lost child or one who has gotten into trouble to his mother are very common.

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APPENDIX B

The Masculinity-Femininity (MF) Scale of the Minnesota Multiphasic Personality Inventory*

This scale consists of 60 items ranging over the interest patterns, hobbies, and types of activities preferred by the two sexes. Each response scored in the specified direction receives one point, thus a total of 60 points is possible. The higher the score, the more indication of the preference for culturally feminine roles and behavioral patterns and rejection of masculine interest patterns is demonstrated.

True

- 4- I think I would like the work of a librarian.
- 25- I would like to be a singer.
- 69- I am very strongly attracted by members of my own sex.
- 70- I used to like drop-the-handkerchief.
- 74- I have often wished I were a girl. (Or if you are a girl) I have never been sorry that I am a girl.
- 77- I enjoy reading love stories.
- 78- I like poetry.
- 87- I would like to be a florist.
- 92- I would like to be a nurse.
- 126- I like dramatics.
- 132- I like collecting flowers or growing home plants.
- 134- At times my thoughts have raced ahead faster than I could speak them.
- 140- I like to cook.
- 149- I used to keep a diary.
- 179- I am worried about sex matters.
- 187- My hands have not become clumsy or awkward.
- 203- If I were a reporter I would very much like to report news of the theatre.
- 204- I would like to be a journalist.
- 217- I frequently find myself worrying about something.
- 226- Some of my family have habits that bother and annoy me very much.
- 231- I like to talk about sex.
- 239- I have been disappointed in love.
- 261- If I were an artist I would like to draw flowers.

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- 278- I have often felt that strangers were looking at me critically.
- 282- Once in a while I feel hate towards members of my family whom I usually love.
- 295- I liked "Alice in Wonderland" by Lewis Carroll.
- 297- I wish I were not bothered by thoughts about sex.
- 299- I think that I feel more intensely than most people do.

False

- 1- I like mechanics magazines.
- 19- When I take a new job, I like to be tipped off on who should be gotten next to.
- 26- I feel that it is certainly best to keep my mouth shut when I am in trouble.
- 28- When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
- 79- My feelings are not easily hurt.
- 80- I sometimes tease animals.
- 81- I think I would like the kind of work a forest ranger does.
- 89- It takes a lot of argument to convince most people of truth.
- 99- I like to go to parties and other affairs where there is lots of loud fun.
- 112- I frequently find it necessary to stand up for what I think is right.
- 115- I believe in a life hereafter.
- 116- I enjoy a race or game better when I bet on it.
- 117- Most people are honest chiefly through fear of being caught.
- 120- My table manners are not quite as good at home as when I am out in company.
- 133- I have never indulged in any unusual sex practices.
- 144- I would like to be a soldier.
- 176- I do not have a great fear of snakes.
- 198- I daydream very little.
- 213- In walking I am very careful to stop over side-walk cracks.
- 214- I have never had any breaking out on my skin that has worried me.
- 219- I think I would like the work of a building contractor.
- 221- I like science.
- 223- I very much like hunting.
- 229- I should like to belong to several clubs or lodges.
- 249- I believe there is a Devil and a Hell in afterlife.
- 254- I like to be with a crowd who play jokes on one another.
- 260- I was a slow learner in school.
- 262- It does not bother me that I am not better looking.

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- 264- I am entirely self-confident.
280- Most people make friends because friends are likely
to be useful to them.
283- If I were a reporter I would very much like to
report sporting news.
300- There never was a time in my life when I liked to
play with dolls.

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APPENDIX C

Testing Instructions

A. Instructions for the production of the thematic stories:

The following mimeographed instruction sheet was given to each individual before the thematic cards were projected on the screen. The examiner also read the instructions aloud:

You will shortly see a number of pictures on the screen. Please write a short story about each picture. Your story need not be very long, but must include the following points:

- a. What is going on?
- b. What led up to the situation?
- c. What is going to happen?
- d. How do the people (or the person) in the story feel (or feels)?

Please write your name on the first sheet. Start each story to a different card on a new sheet. Number your stories from one to six please.

Before projecting each thematic card on the screen, the examiner repeated the following additional directions:

Imagine the scene involves a father-son (or a mother-son) relationship. Write your story from this point of view.

B. Instructions for the human figure drawings:

The following instructions were read orally by the examiner in connection with the production of the human figure drawings:

Please write your names in the upper right hand corner of the sheet of paper. Under your name write number "One." I want you to draw a person. Please draw the whole person and do not draw a stick figure.

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When all the Ss' were finished with the first drawings, they were given the following directions orally:

Please write number "Two" on the second page. Now draw a person of the opposite sex. That is, if you drew a male figure first, now draw a female figure. Please do not draw a stick figure.

C. Instructions for the Minnesota Multiphasic Personality Inventory:

Each MMPI booklet contained specific directions for responding to the questions. In addition, the booklet contained the following additional mimeographed questionnaire for further information regarding the background of the individuals.

Family Structure and Background Questionnaire

Please put a check mark in front of the item which is most applicable in your case.

1. Are your parents both alive? Yes No

2. If the answer is "No," please check one of the following items:
 - a. Did one of your parents die when you were a child? Yes No
 If so, which one? Mother Father

 - b. Did one of your parents die when you were an adolescent? Yes No
 If so, which one? Mother Father

3. Are your parents currently living together? Yes No

4. If the answer is "No," please check one of the following items:
 - a. Did your parents divorce each other when you were a child? Yes No
 If so, with whom did you live? Mother Father

 - b. Did your parents divorce each other when you were an adolescent? Yes No

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If so, with whom did you live?

Mother Father

- c. If you didn't live with one of your parents, please indicate with whom you lived:

When you were a child:

When you were an adolescent:

5. Are you the only child?

Yes No

6. If the answer is "No," specify the order of your birth and the number of your brothers and sisters.

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APPENDIX D

Swensen's Scale for Sexual Differentiation*

In the preparation of his scale, Swensen used all the drawings in the Knoxville, Tennessee Veterans Administration Mental Hospital Clinic. Seven judges were employed in the production of a five-point scale which was then expanded to cover descriptions and examples (points 1, 3, 5, 7, and 9) and four points (points 2, 4, 6, and 8) to be used for rating of drawings that appeared to fall midway between the defined points.

The scale was developed on the basis of the drawings obtained from adult patients. Swensen reports a reliability coefficient of .84 among his judges which is highly significant.

The Scale

- Point 1 Little or no sexual differentiation. There is little or no difference between the two figures, and what difference exists between them does not particularly suggest sexual differentiation.
- Point 3 Poor sexual differentiation. Longer hair on the female than on the male. There may be a slight suggestion of difference in body contour and/or clothing.
- Point 5 Fair sexual differentiation. The female definitely has longer hair than the male. The female clearly has different body contour, with either rounded hips or breasts, or both present. There may be a suggestion of difference in the clothing of the pair.
- Point 7 Good sexual differentiation. The female has longer hair than the male. The female has body contour, the male has angular body contour. Breasts and/or hips present, with both usually present. There is a clear difference in clothing with the female.

*Adopted from J. Clin. Psychol., Vol. 11, 1955, pp. 37-41.

Point 9

wearing feminine apparel, although the apparel may be copied after that of the male, e.g., slacks. There may be the suggestion of differentiation in minor details, such as eyelashes or fuller lips on the female.

- Point 9 Excellent sexual differentiation. Female hair is longer than male hair, with definite feminine hair styling in the female. The male body has angular contour, the female body has rounded contour with both rounded hips and breasts present. The male wearing clothing that is definitely masculine, the female wearing clothing that is clearly feminine. Minor details, such as eyes, mouth, earrings, bracelets, etc., clearly appropriate for the sex of the figure on which they are drawn.

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APPENDIX E

Coding Manual for Rating the Thematic Stories

Part 1: Rating Scale for the Variable of Warmth

Each thematic story is scored on a 5-point scale which extends from zero, the lowest end to four, the highest end of the scale. Two is the mid-point. The story is rated by a judge who is qualified in the field of clinical psychology with experiences in respect to the concept of projection. Both manifest and latent contents of the story should be taken into account.

4 points The story definitely demonstrates and expresses a very close and warm relationship between the two figures involved. The characters are seen as having a reciprocated high degree of affection for each other marked with significant empathy, love, and understanding.

Examples:*

Card 7 BM- It seems to me that this story portrays a relationship of great understanding and admiration. Obviously the boy is saddened by some event. The father, an elderly and kind business man approaches the son. The father starts his talk kindly, almost as if he was talking to a young child. He was soothing to the anxious thoughts of the son. They are very closely attached to each other.

Card 8 BM- The boy is day-dreaming about his father, which he worships. His father has always been a great man in the boy's eyes, he is a hunter, a great hunter,

*The stories appearing in this manual as examples are actual accounts given by the individuals. They are exactly quoted as they appeared in the original protocols.

Card 12

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and the boy knows that he is nearly a saint. The boy is planning to be just as his father is. He feels as if he were in heaven with a God where he is with his father and he worships the ground he walks upon. The father feels the same way for the boy.

Card 12 M- An extreme love between father and son existed in this story. The boy is sick and his father's heart is broken for he loves his only son very much and has hopes that he would have a full and happy life. The boy also loves his father very much. He will get well and his father shall be very happy.

Card 6 BM- The boy had gotten word that he was drafted and he was to report tomorrow morning because of a war. He has just now told his mother of the situation. She immediately thinks that he will be killed. She loves her son very much and is filled with sorrow to hear the news. The son loves his mother almost too much and hates to leave her. But what can he do?

Card 5- The picture is that seen by the eyes of the son, his mother is a very beautiful woman with very full breasts. He was breast-fed as an infant and without knowing it longs for the peaceful feeling of his head lying in that same place again. The picture suggests that the mother has opened the door to check on her dear son. The young man who is very emotional is going to step to his mother and hug her. She loves it very much.

Card 11 B- The mother, being an older woman to bear a child of that age is not annoyed with the boy's behavior. If she were disturbed and were a harsh mother, she would be glaring angrily at her son as the officer spoke. She loves her son very much. He is an only child and has had her every consideration and care and worry. He loves his mother very much too.

3 points The story seems to imply a close relationship between the figures. There is indication of affection and empathy between the characters together with some degree of warmth and understanding. Likewise, concern and care is expressed.

Examples

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Examples:

Card 7 BM- The son has just lost his job because of automation. The father is giving the son advice in how to survive this trial of life. The father is very sympathetic towards his son and would like to have been able to comfort him better. The son likes his dad a lot and will finally get another job and soon both will go on pretty much as before, or possibly better.

Card 8 BM- Little boy admirably remembers how his doctor father saved a man's life in an auto accident where only immediate help could save life. The father let his son watch the operation because he likes his son. The boy is completely won to the thought of himself being a doctor since that event.

Card 12 M- His wife had just died. He was sitting late at night thinking of when his son had been born and how happy he was at that time. He thinks that now his son is almost grown and it seems like he was a baby only yesterday. He feels sad and happy at the same time. Sad that time has gone so quickly and happy that his son has grown into such a fine young man. He goes to his son's room and looks at him and remembers all those past happy years, the years that he and his wife had had with him.

Card 6 BM- The son has just told his mother of a promotion he has received. This promotion will take him far away, but he must take it. The mother, though proud of her son, realizes that she will not see him for a long time. The son promises to keep in touch. She recovers immediately and sends him on his way without letting him know the pain she feels.

Card 5- A young boy's girl whom he was engaged to has just broken up with him. He has been in his room all day because he is very upset. His mother cares for her son a lot and is peeking into his room to see if he is awake. She wants to help him if she can but she is afraid to comfort him because their age difference and ideas. Her son will see her and let her come in. They will talk.

Card 11

2 point

Example

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Card 6

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Card 11 B- An officer appears and brings the mother's son home. The son was lost in the new neighborhood. He is a little worried what his mother might say. The mother loves him dearly and is happy and relieved that he has been brought home.

2 points The story demonstrates average degree of warmth and closeness primarily elicited by the stimulus content of the card. The theme may explain the characters as being close together, but the affection in the relationship is casual and not above and beyond what is expected on the basis of chance.

Examples:

- Card 7 BM- The son has just explained to his father that while he feels concerned about other people and cares about their feelings, generally the world is composed of self-seekers. The father states that this is a common feeling at some point in the life of every one. The son may attempt to determine a stable relationship between himself and other people.
- Card 8 BM- The scene apparently takes place at the time of the American frontier. The son has just returned from a boarding school in England-hence the tie and jacket. His father has been wounded and is about to undergo surgery. The results are uncertain and from the picture it seems that the boy looks numbed.
- Card 12 M- It seems from the picture that one of the two, probably the son is ill on the bed and has a temperature. The father is about to feel his forehead. This explains the hand position shown in the picture. He may feel concern if he is going to feel the boy's forehead. The son will soon recover.
- Card 6 BM- The mother has been expecting her husband home for quite a long time. He has not showed up and she and the son have realized that something must have happened to him. They are discussing the situation. The mother as the picture shows is watching out of the window for her husband. Both of them seem to be worried from the way the picture looks.

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Card 5- The mother heard a crash in the living room where the baby son was playing and she is investigating the disturbance. A look of curiosity shown in the picture appears on her face. The baby probably has broken a vase or such, but the baby's back is to the mother and is not shown in the picture. She will proceed into the room and locate the trouble.

Card 11 B- From the look of the picture it seems that a cab driver is bringing home the little boy, Joey. It seems that Joey like all other boys was running away from home to play in another area. The look on the mother's face may be that of a surprise or relief. It is difficult to tell from the picture. The boy will go in side and probably life goes on as usual.

1 point The story clearly lacks any reference to the expression of love, affection, or closeness between the figures involved. The stimulus material is interpreted in terms of characters being upset, ambivalent with a negative tone, or having no warm feelings towards each other.

Examples:

Card 7 BM- The son in the picture has gotten into trouble, but didn't know if he should go to his father or not. Finally having had no one else to talk to he went to his dad, although he knew he could get little affection. He is now talking the matter over, but it is useless. Nothing will come out of it. The father doesn't understand the boy and doesn't care too much either.

Card 8 BM- It looks like a father is telling his son about an operation he did years ago. The son is not particularly interested in what his dad is telling him. He doesn't care less if the old man was a big shot in his days. The father does not have any feelings either. I would say they both have no feelings towards each other.

Card 12 M- In this picture the father is about to reach out and touch his sleeping son. The father is malformed, a hunchback. His son is everything he isn't--dignified, respected, well-liked. As a result the two of them live in two different worlds. The son feels indifferent toward his

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father and of-course his father is very jealous of his son. So he has mixed feelings.

Card 6 BM- Bob Wilson was a big wheel in New York. Yes, he had everything going his way. So he just couldn't make his immigrant parents come to live with him. Bob never went to them to see them. But when Mr. Wilson died, Bob quickly came to the funeral. Yes, it took his dad's death to bring him home away from his work. But his mother seemed indignant towards him as he entered the house. She knew that he was partly responsible for his father's death.

Card 5- The mother has not seen her son for many years. A neighbor told her one day that her son was in town. Out of curiosity she went to see him. As she opened the door she heard laughter and saw a woman with her son. This woman is his wife, but the mother didn't know anything about the marriage. The son didn't think enough of her to let her know of his marriage, so she leaves the room unhappy. Perhaps she knows it was partly her fault too.

Card 11 B- Something happened to the son as he ran away. This other man found him and brought him back to his mother. She couldn't understand why he ran away. The boy has no love for his mother and feels sad because he was caught and returned home to his mother. She is astonished and doesn't understand why her son should run away.

0 point The story clearly demonstrates animosity, hostility, hatred and dislike between the characters involved. The figures are seen as having open negative feelings for each other with marked dislike and hatred on either side.

Examples:

Card 7 BM- A son is conversing with his father. The son, a famous entertainer is telling his old-country, religious father that he is divorcing his wife to marry a famous actress. The father is quite upset and angry because basically he has no love for his son. The son likewise is paying no attention to what the old man is saying but is thinking what an old fashioned fool his father is. Having no understanding or love for

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each other they will each go his own way.

- Card 8 BM- The son hates his father and is wishing his father would not recover from the operation. Probably as his hate grew, he shot his father with the gun. Even though his father is hurt or dead, the son still has hate in his eyes. He is not much to be blamed, because his father also hated and made life miserable for his son. He deserved what he got.
- Card 12 M- The father just escaped from a mental institution and is going to try to kill his son. He feels that his son hates him because the son was the one who had him committed. The son is completely unaware of what is going on. When the father touches the son he will wake up and overpower his father and have him sent back to the mental hospital.
- Card 6 BM- The young man's father had worked and had acquired a large amount of money by the time he died. All the money was left to his wife and the young man is their only son. The son is wondering how he can get rid of his mother and receive the money. The mother is wondering how she could get rid of the son to keep the money. The boy will then kill his mother, but will get caught and will finish his life in prison.
- Card 5- The mother heard talking in her son's room and went to investigate. Upon opening the door to her son's room she was shocked to see him in bed with a young woman. The mother and son had never gotten along and he didn't care what she felt and yelled for her to get out and go to hell. She yelled back the same and ordered them to get out of the house.
- Card 11 B- The story is about a boy who is playing in the street and the policeman takes him home. The mother promptly denies her son's existence and tells the officer he is a neighborhood orphan. The policeman takes the boy to an orphanage and the mother thinks, : "Hee, hee, got rid of another one." The boy is happy he got rid of her too.

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Part II: Rating Scale for the Variable of Saliency

Each thematic story is scored on a 5-point scale which extends from zero, the lowest end to four, the highest end of the scale. Two is the mid-point. The story is rated by a judge who is qualified in the field of clinical psychology with experiences in respect to the concept of projection. Both manifest and latent contents of the story should be taken into account.

- 4 points The theme of the story clearly expresses a dominant relationship between the characters. The effectiveness of this relationship may be either of a positive (i.e., rewarding) or negative (i.e., punishing) nature. In either case the effectiveness of the salient relationship determines the course of the action taken by either of the two figures, usually the one perceived as the son. Likewise, the nature of the interaction between the figures is clearly and explicitly demonstrated.

Examples:

Card 7 BM- This is a scene in the Smith house. Bob Smith has just told his father that he is in trouble and desperately needs help. Mr. Smith and Bob have always been very close and understanding with each other. So he will try to give his son sound advice. The son without any hesitations follows his father's suggestions and will be able to solve his problems and again renew his confidence for his father's judgments.

" " This is a father-son situation. The boy wants to marry a girl who is not a part of the family clan. His father is dead set against it and places his foot down. The boy has always listened to his father and is unable to do other-wise for the fear of punishment. So, he will do what his father wishes, will give up his girl.

Card 8 BM- This picture shows a son who is admiring his father. He is day-dreaming about his father who is a famous doctor. He is wishing that someday he might be a doctor just like his father. The father who has much admiration and love for his son will help him throughout the years until the boy goes to medical school and will turn out a fine doctor just like his father.

Card 12

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- Card 12 M- My son, you worked hard with me in the field today. Side by side we worked and we worked well together, as we always do, didn't we? Tomorrow it shall be the same, as for many days to come. You know I will send you to school and I am saving up for you. You have made me proud of you and I will do everything to make you proud of me.
- Card 12 M- This boy has just gone to sleep. His father is about to wake him up to send him on an errand. The boy doesn't want to get up, but he has no other choice. His father has always been the boss and the boy has done nothing but obeying him all his life. He will get up and do what his dad wants him to.
- Card 6 BM- The son has asked his mother for advice. She has given it to him and he is going to do just what she wants him to. This situation has come up many times. The boy feels that he cannot go to his father so he relies on his mother whom he loves and respects. He knows and trusts her and will follow her instructions.
- Card 5- The mother is looking in the door to see if her son who is going to college but studying at home wanted anything to eat or drink. The mother usually does this every night for him because she is glad and proud that her son is getting "A's" in science. She wants him to become a great scientist. The son is happy that his mother takes such interest in his welfare and his studies and tries all the more harder to do well to please her.
- Card 11 B- The policeman is bringing the son home after 9:00 P.M. The mother is quite surprised to see the policeman bringing the boy home, but she was happy that her son only got lost but was smart enough to ask a policeman for help. His mother had always told him to do so whenever he was in trouble and the boy did just what she had told him. The boy has a warm supper, bath, and goes to bed.

3 point

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- 3 points The theme of the story seems to imply involvement and saliency of relationship between the two figures. Thus the effectiveness of the salient relationship may not be as explicit as before, nevertheless present. Stories involving implicit implications of reward (mostly in the form of giving advice or counseling) or punishment (in the form of mild reprimand) are scored in this category.

Examples:

- Card 7 BM- The boy has had an affair with his girl-friend and she is now pregnant. Failure to heed his parents' warnings caused this unfortunate incident. The boy is confused and very sorry. His father is giving him advice. Both the boy and his dad know that it is up to the boy to make the final decision. All his father can do is to show him a way.
- Card 8 BM- Someone is about to perform surgery on the young man lying on the table. I believe that the man doing the surgery is the father. The son is still quite young, but the father had a discussion with the son about following in his footsteps as a surgeon. The boy does not know whether he wants this yet or not. He is afraid that if he becomes a doctor that he will not be able to perform at his father's expectations. He needs time to think about the whole situation.
- Card 12 M- The boy wonders why anyone who is so good has to die. His father has been there at all times to guide him whenever he needed it. But what is to happen now? In the past he sometimes listened to his dad's advice, but what now? Who is going to guide him now?
- Card 6 BM- It seems that the boy is asking his mother for advice in regard to the female sex. He figures that his mom knows much more than he does. His mother wonders if her son is going to get married. He says that he wants to. She gives him some good advice and the boy is going to take some of them when he chooses his bride.

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Card 5- The mother has obviously been shocked by something she has just seen, and since this is a mother-son relationship it is likely to conclude that what she has seen is being done by her son . . . possibly smoking in his room. She will probably punish him and discourage this action.

Card 11 B- The boy has been apprehended attempting to steal crab-apples from a tree down the block. He and a few friends decided to do it for excitement. The mother is going to give the boy a good tongue-lashing and then let the father take care of the physical part. The mother is angry, but deep down she feels a little amused. The boy is scared to death, mostly from his father.

2 points The theme of the story may allude or make reference to a dominant or salient relationship, but the strength and significance of such a relationship is not above and beyond what is expected on the chance basis due to the nature of the stimulus material. The overall theme conveys neutrality in the relationships and neither explicit or implicit indications of reward or punishment is apparent.

Examples:

Card 7 BM- George Jr. has just arrived home from State University. He and his father are discussing the world situation. George has asked his son what are his opinions about the Panama Zone crisis. George Jr. says that he feels although many people don't realize it, but college students do play an important role in the world situation. They will discuss such topics a little longer.

Card 8 BM- Mark who is a med. student has seen his first operation performed in the university hospital. He recalls the Park Davis historical picture of a pioneer operation performed in 1770 with nothing but bucket of hot water and a knife. He is thinking how much more faster and how much more efficient the modern MD is today.

Card 1.

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Card 12 M- David Copperfield has just gone to bed for the night when his so-called mother's husband comes in to check on him. This is right at the beginning of the story. No emotion is shown. It is just a short scene from a story. His step-father is just checking to make sure he is asleep.

Card 6 BM- Mother and son are standing by the window and discussing the weather. She wonders if it is going to rain and if so perhaps she better stay home rather than going out to see a show. The boy is wondering if he too should cancel his golf appointment in case it might rain.

Card 5- Mrs. Johnson is opening Billy's bed-room door to tell him supper is ready. Evidently Billy has played quite a bit that day and was very tired, so he went up to his room to rest. He will go down to have his supper now.

Card 11 B- This shows a situation where a policeman has brought the boy to his home. It seems that the boy got into some kind of trouble in the street and the officer had to take him to his home. It is hard to say if his mother will do anything to him or not. The picture is not clear.

1 point The theme of the story does not demonstrate the existence of a salient relationship between the characters. There may be, in addition, implications of a desire or willingness on the part of the figures to remain detached, un-involved, and un-interested in each other's affairs. One of the two figures may be rejecting of the advice or the interest given or shown by the other figure.

Examples:

Card 7 BM- The father is trying to give the son some advice because he feels he has to. The son listens without much interest and does not take the advice. He feels his father does not understand the situation and is not able to give sound advice.

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- Card 8 BM- The boy in the picture is very proud of his father, at least used to be once. He was going to become a doctor like his father. He will become disillusioned later in life, however, when he finds that his father's fame and pre-occupations caused his father to lose interest in the boy's life. The boy will then try any other profession and give up his training in hopes of escaping his father's fate.
- Card 12 M- The boy is sleeping soundly. His father who he has never seen his son returns to see him one night. The father is apprehensive, because he has guilty complex that he left his son when he was so small. He is almost afraid to look his son right in the eye and will go away again.
- Card 6 BM- It seems that either the conversation is dull or neither the mother nor the son is interested in what is going on. The young man may be telling his mother that she is welcome to come to his wedding although in the past they never were too close. The old lady is not interested in his son's marriage or whatever he wants to do. So she may say she would rather not go to the wedding.
- Card 5- The mother is going up to encourage his son to do his work, but there is no use. Billy has always done his own way and rarely listens to his mother. Although the poor old woman tries hard to get through to him, there is no use. Finally she is just going to give up.
- Card 11 B- A policeman has brought the boy to his mother. The boy had run away. Reason: Poor home condition. The mother is very sorry that she didn't do a job of being a mother. The boy is not sure that he wants to come back home to his mother or not.
- 0 point The theme of the story clearly demonstrates a desire on the part of the figures to remain distant, uninvolved, and un-attached. The figures are expressed as having no interests in influencing each others' course of action. Explicit long-range lack of involvement of saliency on the parts of the figures is shown.

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Examples:

- Card 7 BM- The young man is about to leave the house. The situation has come about because there has been constant fighting between the two. The father has never cared for his boy and has paid no attention whether he was alive or dead. The boy feels its time to tell his father off and leave the house for good. I guess both of them will be glad that they won't have to do anything with each other any more.
- Card 8 BM- A young teenager and his father have had a violent argument. In the rage the boy picked up the gun and shot his father. It serves him right. The old man was never interested in his son and was always drunk. The son doesn't care if he has killed his father, because he is going to run away.
- Card 12 M- Here is a father who has just choked his son to death and is making sure that he is dead. The boy has always been his mother's favorite and she has guided him and helped him to grow. The father who is the town drunk wanted to get rid of his son, so he killed him. He will be sent to the electric chair soon.
- Card 6 BM- Now that the father is dead it is time to talk about who is going to get the bigger share of the money. John knows that his mother would want everything for herself. This had always been the case. There had never been any motherly love or advice from her all these years but neglect. She never cared how her son was brought up and now she is going to get all that money. He won't have it. He would do anything to get even with her this time.
- Card 5- The mother has just come home. When he looked into her son's room she was shocked to see him in bed with his girlfriend. Why not? She never cared what he did or where he went or with whom he associated. He doesn't give a darn what she feels. He is going to leave her for good. He should have done years ago.

Card 11 B- "Why does the policeman have to take me home?" Johnny is thinking to himself. "I wanted to run away from home. My mother never cared for me and doesn't want me there." This is true. The mother is going to ask the policeman to take him to an orphanage. She has too many other boyfriends to worry about and no time for Johnny. I think the boy will be much happy away from her. They probably will never see each other again.

APPENDIX F

Reliability Correlations for Individual Cards for
the Three Judges (N = 34)

Card 7 BM					
	Warmth			Saliency	
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 3
Warmth					
Judge 1					
Judge 2	.7499***				
Judge 3	.7406***	.8343***			
Saliency					
Judge 1	.5056***	.5176***	.4756***		
Judge 2	.4556***	.6531***	.6538***	.7814***	
Judge 3	.4245**	.5215***	.5084***	.6934***	.8348***

Card 8 BM					
	Warmth			Saliency	
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 3
Warmth					
Judge 1					
Judge 2	.8795***				
Judge 3	.7692***	.7901***			
Saliency					
Judge 1	.7987***	.8042***	.6648***		
Judge 2	.6640***	.7751***	.5667***	.7911***	
Judge 3	.4770***	.5332***	.4221**	.5336***	.7366***

*Significant at .05 level.

**Significant at .01 level.

***Significant at .005 level.

Card 12 M

	Warmth			Saliency		
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3
Warmth						
Judge 1						
Judge 2	.8202***					
Judge 3	.7242***	.7927***				
Saliency						
Judge 1	.4567***	.3730*	.2906			
Judge 2	.4488**	.3176*	.2829	.6992***		
Judge 3	.4330**	.2491	.4330**	.6406***	.5641***	

Card 6 BM

	Warmth			Saliency		
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3
Warmth						
Judge 1						
Judge 2	.8073***					
Judge 3	.7937***	.8796***				
Saliency						
Judge 1	.4588***	.4174**	.5038***			
Judge 2	.5724***	.6621***	.7132***	.6249***		
Judge 3	.5498***	.5363***	.7367***	.4995***	.7387***	

*Significant at .05 level.

**Significant at .01 level.

***Significant at .005 level.



Card 5

	Warmth			Saliency		
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3
Warmth						
Judge 1						
Judge 2	.7743***					
Judge 3	.7785***	.8505***				
Saliency						
Judge 1	.2195	.0662	.2077			
Judge 2	.3559*	.3131*	.4372**	.8471***		
Judge 3	.2159	.0175	.3095*	.8447***	.9256***	

Card 11 B

	Warmth			Saliency		
	Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3
Warmth						
Judge 1						
Judge 2	.6355***					
Judge 3	.4841***	.7919***				
Saliency						
Judge 1	.2106	-.0583	.2296			
Judge 2	.1743	-.0018	.1961	.8415***		
Judge 3	.2219	-.0409	.1994	.7698***	.7403***	

*Significant at .05 level.
 **Significant at .01 level.
 ***Significant at .005 level.



Reliability Correlation Coefficients for Series A and B
Cards for the Three Judges (N = 34)

		Series A: warmth			Series B: warmth		
		Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3
Warmth	Series A	Judge 1					
		Judge 2	.8252***				
		Judge 3	.7399***	.8106***			
	Series B	Judge 1	.1437	.1201	.1087		
		Judge 2	-.0057	.0114	.0617	.7579***	
		Judge 3	-.0222	.0122	.0750	.7121***	.8419***
Saliency	Series A	Judge 1	.5774***	.6022***	.5571***	.1469	.0577
		Judge 2	.5335***	.6243***	.5640***	.0731	-.0465
		Judge 3	.4534***	.4576***	.4787***	.1508	.1173
	Series B	Judge 1	-.0582	-.0688	-.0746	.2683	.1282
		Judge 2	-.0947	-.0899	-.0792	.3602*	.3312*
		Judge 3	-.1041	-.0694	-.0966	.3008*	.1880

*Significant at .05 level.

**Significant at .01 level.

***Significant at .005 level.

Series A: saliency			Series B: saliency		
Judge 1	Judge 2	Judge 3	Judge 1	Judge 2	Judge 3

.8095***

.6175***

.7076***

.0530

-.0408

-.0462

-.0145

-.1314

-.0431

.8064***

-.0463

-.1338

-.0382

.7702***

.8348***





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