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## The Relationship of Gender and Personality to Fantasy Patterns

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THE RELATIONSHIP OF GENDER AND PERSONALITY  
TO FANTASY PATTERNS

by

EILEEN F. BERNAT

A THESIS Submitted to the Faculty of the Graduate  
School of Loyola University of Chicago in Partial  
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## VITA

The author, Eileen Frances Bernat, is the daughter of Barney Joseph Bernat and Evelyn (Nault) Bernat. She was born April 9, 1959, in Dayton, Ohio.

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## CHAPTER I

### INTRODUCTION

#### Purpose

In 1966, Robert May published his finding of a gender difference in fantasy patterns, as measured by the Thematic Apperception Test. He determined that males were more likely to create stories moving from "enhancement" material, or accomplishment, positive emotion, and satisfaction, to "deprivation" material, consisting of negative emotion, failure, and loss. Females' stories were more likely to move from "deprivation" to "enhancement". May explained his findings using theories of "feminine masochism" and the "Icarus complex". The present study is an attempt to replicate the sex difference phenomenon and offer an alternative explanation for it. In addition, the study investigates personality and background variables which may influence deprivation-enhancement patterns.

#### Gender Differences in Psychological Functioning

Interest in the similarities and differences between men and women is not a new phenomenon. Although modern psychological methods have made the study of gender differences more scientific and empirical, theories as to the nature of men and women have abounded throughout the

ages. Fromm (1943) discussed the different views held by philosophers of the eighteenth and nineteenth centuries. Enlightenment philosophers believed that any gender differences could be explained by differences in education and upbringing, while Romantic philosophers argued for innate biological and physiological differences and used this position to decry women's participation in social and political life on an equal level with men.

Some modern psychological theorists have reasserted the Romantic doctrine and have concentrated on providing explanations for how anatomical differences inevitably result in personality and behavioral differences between men and women. Freud (1933/1965), for example, theorized that the lack of a penis causes girls to envy those possessing one, which later leads to what he saw as women's greater tendencies to feel jealousy, their lesser sense of justice, and their weaker control over their instincts, as compared to men. Thus, although he admitted that environment influences the degree of these tendencies, he saw their direction as biologically determined.

Although Freud's and other similar views have held sway within the psychological establishment for most of this century, the growth of feminism has led to a questioning of such theories. Interestingly, some feminists espouse a biological theory which holds that women are superior to men by virtue of their more intimate connection to conception and birth processes. Most, however, have denied the importance of anatomy and have, like the Enlightenment philosophers, emphasized the



importance of sex-typed methods of child-rearing and other cultural influences.

Over the last few decades, researchers have struggled to empirically discover what, if any, true gender differences exist. Maccoby and Jacklin (1974) reviewed a large number of gender difference studies and concluded that few actual sex differences exist. Certain assumed differences, such as girls being more "social" or "suggestible" than boys, were not supported by empirical research. Four rather well-established differences were found, including girls' greater verbal ability and boys' greater aggressiveness, visual-spatial, and mathematical abilities. Except for aggressiveness and to some degree visual-spatial ability, these differences seem to be explained primarily by cultural differences, since they do not appear until adolescence. Genetic factors apparently predispose more boys than girls to have good visual-spatial ability, but practice, which can be affected by environmental expectations, improves that skill. It is aggressiveness which Maccoby and Jacklin point to as having the strongest biological component, since the difference occurs early in life and can be affected by hormones. It is clear, then, that the empirical research has provided evidence of few consistent, specific behavioral or characterological gender differences.

Recently, some writers have theorized that males' and females' disparate life experiences lead to different, but equally valid, world views. For example, Miller (1976) has theorized that men's development includes recognition of themselves as part of a dominant or superior

group which defines acceptable roles for both the dominant and the subordinate group members and determines the culture's overall outlook. Women (and sometimes men belonging to cultures that do not accept the dominant values) come to see themselves as subordinate and are encouraged to develop characteristics that are pleasing to the dominant group. The effect of this dichotomy is that men and women are expected to experience certain aspects of life differently. In keeping with this, Miller points out that although feelings of weakness, vulnerability, and helplessness are part of the human condition, men in our society are encouraged to dread and deny these feelings, while women are expected to acknowledge and accept the feelings in themselves. Both sexes are taught, however, that experience of these feelings brings suffering. In another example, Miller notes that men and women experience cooperative activity differently. Because they must maintain themselves as dominant, men perceive cooperation as giving something up, whereas women have no reason to perceive loss in that situation.

In an enlargement upon Miller's theory, Schaef (1981) conceptualizes the existence of separate reality systems in society. The dominant so-called "White Male System" is believed by its adherents to be the only system that exists and, paradoxically, to be innately superior to all other systems of reality. Within this system it is supposed that one can eventually know, understand, and explain everything that exists. In addition, it is considered entirely possible to be totally logical, rational, and objective, and such adherents fervently believe that they

are doing so. Schaeff goes on to indicate the presence of a female system, developed in reaction to the dominant "White Male System". The implicit assumption of this reactive female system is that women are innately inferior and must employ various strategies to cope with their inferiority. Such strategies include following the rules of the dominant system in the hope of blending into that system, developing a great capacity for total understanding of other people, attaching to a male in the hope of validation and approval, and, most of all, denying perceptions which conflict with the dominant conception of reality. Finally, Schaeff points out the emergence of a nonreactive "Female System" which defines experience in terms of relationships rather than in terms of self and work. This concept includes not only relationships with other people but also a relationship with one's self and may eventually include a sense of relationship or connection to all aspects of the universe. Other tenets of the "emergent Female System" include a focus on processes rather than on goals, multidimensional rather than linear thought, intuitive versus logical thinking, and a conception of power as increasing versus given up when shared. Schaeff is careful to note that neither the dominant system nor the "emergent Female System" is superior to the other; both contain concepts and strategies which are helpful in different situations. The problem, in her view, is that most people are not aware that different ways of perceiving reality exist. Schaeff's view is important in that it challenges the traditional notion that males' and females' perceptions of reality are similar and that, therefore, one theory can be applied to understanding persons of both sexes.

Another theorist who has proposed different ways of viewing male and female development is Gilligan (1982). Gilligan criticizes Kohlberg for constructing his theory of moral development (1969) from studies done solely with males and then assuming that the theory would apply to women as well. Kohlberg measures moral development by asking subjects questions about a hypothetical moral dilemma. As Gilligan (1982) points out, not only do women as a whole earn consistently lower morality scores using the Kohlberg task and system than do men, but there is evidence that women conceptualize the task differently from the male subjects and designers of the task. Kohlberg and others (Block, 1973) have chosen to explain these findings by asserting that women's development makes their ideas about morality inferior to and more simplistic than those of men. Instead, Gilligan's research points to different equally valid developmental paths. In her view, male development is first concerned with issues of self-identity, of separation from others, while females are concerned with issues of intimacy and attachment. As related to moral development, males first perceive the world in terms of rights, equality, and reciprocity, while females develop an "ethic of care", an awareness of responsibility for others. As men move from identity issues toward issues of intimacy, their view of the world expands to include a sense of responsibility to others in addition to themselves. As women encounter issues of selfhood, their "ethic of care" which previously had been extended only to others expands to accept the self as an object of responsibility as well. Thus, in Gilli-

gan's view, mature human development is reached by different paths in men and women. Her work, like that of Schaef and Miller, supports the notion that males' and females' views of the world differ.

#### Deprivation-Enhancement Patterns in Males and Females

One of the earliest attempts to understand the different world views of men and women was offered by the deprivation-enhancement theory of Robert May. In a 1966 article, May referred to the psychoanalytic view that biological differences between men and women determine the differences in their thinking and behavior. Freud (1933/1965) had introduced not only the idea of female "penis envy" but also that of masochism. He theorized that both societal proscriptions and a greater female need for affection force women to repress their aggressiveness, thereby leading to "the development of powerful masochistic impulses, which succeed in binding erotically the destructive trends which have been diverted inwards" (Freud, 1933/1965, p.116). Deutsch (1944) enlarged upon Freud's formulation, arguing that a feminine woman displays three primary traits: passivity, masochism, and narcissism. Passivity in this case is defined not as inactivity or apathy but as a tendency to direct activity inward. This tendency is assumed to develop as a result of both constitutional and social pressures. The inhibition of not only activity but also aggressive impulses leads to a masochistic state in which the pleasure of being loved (experienced passively) is associated with pain stemming from the need of aggressive impulses to find an outlet. As May points out, "pain" can include "psychological

discomfort or a risking of the 'self' emotionally or physically" (p.577). According to Deutsch, masochism is a natural adjustment to the functions of womanhood, since, in her view, development must include an anticipation of the pain associated with sexual intercourse and childbirth. These masochistic tendencies can be expressed in various ways: a painful longing and wish to suffer for a lover, renouncing oneself in favor of others, feeling that suffering is compensated by love, and subjecting oneself to a man's will. In May's (1966) view, all of these behaviors and feelings contain a "common theme of willingness to risk one's physical or psychological 'integrity' in order to obtain something which is valued" (p.577). Thus, masochistic behavior can be defined as a sequence or pattern in which suffering is followed by joy, failure by success, and risk by love. In May's terms, which will be described later in more detail, feminine masochism is embodied by a belief that a "deprivation" experience must precede "enhancement."

May (1966) derives his idea of the male pattern from studies by Murray and Erikson. Murray (1955) describes a young man whom he calls "American Icarus". Within this young man, wishes to rise, fly, overcome gravity, and succeed spectacularly coexist with fears of falling and of failure. Murray describes this as an immature syndrome since both the wish to rise and the fear of falling are experienced to the extreme and result from strong narcissism and a set of unrealistic goals. Although Murray discusses an extreme case, May (1966) argues that males generally display this pattern to a lesser degree, given their lifetime experience

with the cycle of penile tumescence and detumescence, an experience which could give rise to unconscious metaphors of ascension and descension. Additional support for this notion comes from Erikson's (1951) study of the play constructions and accompanying stories of preadolescents, in which boys were more likely to be concerned with height and collapse (e.g., building a very high tower with a boy doll beneath it and saying the doll had fallen from the tower). Erikson interpreted this finding as evidence that, in preadolescent boys, extreme height (together with the element of breakdown or falling) "reflects a trend toward the emotional overcompensation of a doubt in or a fear for one's masculinity" (p.686). Erikson suggests that both biological and social factors lead to the male focus on upward movement; that is, the particular qualities of one's sexual organs may set the stage for a different experience of life, but sex-typed learning of roles may encourage boys to prove themselves capable of moving up and out into the world, securing successes, and achieving high standing, thereby making themselves vulnerable to fears of failure. As May (1966) points out, one cannot continually move upward; at some point there must be a decline and throughout life, an awareness of the inevitability of loss following gain, failure following success, and dissatisfaction following high expectations. In other words, May would characterize the male, or Icarian, pattern as "enhancement" followed by "deprivation".

May's interest was in developing a means of testing the hypotheses that men perceive life as consisting of success followed by failure and

women see it as suffering followed by joy. As mentioned earlier, he refers to the presence of suffering, negative emotion, and dissatisfaction as "deprivation" and to positive emotion, accomplishment, and growth as "enhancement". In order to test his theory, he asks subjects to write stories in response to Thematic Apperception Test pictures. May has devised a scoring system that numerically weights deprivation and enhancement material around "pivotal incidents" or anchor points that occur within the TAT stories. A total positive score would indicate that a story tended to move from deprivation to enhancement material. On the other hand, a total negative score would indicate movement from enhancement to deprivation. A score of zero would mean that a story remained either positive, negative, or neutral throughout. According to May's theory, women should tend to receive positive scores, with men receiving negative scores.

May's 1966 article demonstrated the first deprivation-enhancement (D/E) pattern gender difference. College students wrote stories in response to four TAT pictures. A comparison of the overall average scores of the men with those of the women led to a significant gender difference in the predicted direction. Analyses of the stories from each picture separately showed that three pictures produced the sex difference, while another did not. May hypothesized that this picture, which featured a child, was not an effective projective stimulus for adults. May also noted that story length, type of ending, and overall mood of story did not explain the findings. Thus, his study supported the notion that men and women do indeed perceive the world differently.



In 1969 May published a replication of his 1966 study, with some differences. The subjects were somewhat older, only half were students, and the one TAT card used was shown individually and tape-recorded. May found the predicted gender difference and determined that it was not related to age, intelligence, or social class in his admittedly fairly homogeneous group. Other researchers have replicated the predicted gender difference in college students (Bramante, 1970; Cramer & Carter, 1978; Johnson, cited in May, 1980) and in older children (Cramer & Bryson, 1973; Cramer & Hogan, 1975; Fakouri, 1979; Saunders, cited in May, 1980). Additional researchers have failed to find a significant sex difference in young children (Cramer & Bryson, 1973; Cramer & Hogan, 1975) and in college students (Rabinovitz, cited in May, 1980; Malmaud, cited in May, 1980). May (1980) notes that Malmaud's subjects showed atypical patterns on a standardized test of personality traits, with the women scoring higher than the men in need for achievement and dominance; he interprets this finding as indicating that her group was not representative. These and other studies investigating deprivation-enhancement patterns will be discussed in more detail later in this paper.

One author who has severely criticized May's work is Fried (1971). Fried states reservations about May's concept of masochism as typifying the fantasies of women and of Icarianism as typifying the fantasies of men and about the adequacy of May's scoring system for exploring these differences. Fried points out that Kinsey's research indicated that responding erotically to a masochistic experience is as common in men as

in women and that men are more likely than women to be sexually aroused by fantasy in general and by sadomasochistic stories in particular. In addition, Fried suggests that men more than women allow themselves to undergo pain in the pursuit of a goal, as may be seen in the willingness of athletes to undergo pain in order to win a game and receive the approval of teammates. Contrasting women's supposed masochism with the Icarianism of males does not work, since Icarian personalities as described by Murray tend to produce sadomasochistic fantasies to a greater extent than the general population. Fried also points out that Murray's Icarians are re-ascensionist, prone to imagining fantastical resurrections after episodes of falling. Finally, Fried questions whether nomothetic use of the TAT is acceptable when it was designed to uncover idiographic information. In his attempt to refute May's theory, Fried argues that if May's gender difference phenomenon exists, it should be even more apparent when sadomasochistic women and Icarian men are compared. In order to test his ideas, Fried assembled subjects classified as Icarian males, non-Icarian males, and sadomasochistic females, in the belief that Icarian males and sadomasochistic females should show the most extreme D/E patterns (positive scores for women, negative scores for men) if May's theory is correct. Fried selected his subjects from case histories taken from colleges, a guidance center, and his own patient files. He diagnosed Icarians by using Murray's listings of Icarian variables to evaluate interviews and psychological tests conducted previously with the subjects. Non-Icarians were selected for

their relative freedom from Icarian characteristics. Sadomasochistic women were those who either had problems resulting, in the therapist's view, from sadomasochistic feelings and ideas, e.g., "inability to free oneself from a long-term heterosexual relationship productive of humiliation and suffering" (p.44), or could be described by comments such as, "prefers suffering to acting out her aggressions" or "normal except for inhibition of aggressiveness" (p.44). Fried notes that the women in his sample could not be considered as diagnostically extreme as the Icarian subjects.

For five of the seven TAT cards, no sex difference was found since most subjects obtained positive scores. Only two cards yielded significant gender differences, in the hypothesized direction. In addition to May's scoring system, Fried utilized a system assessing story conclusions in terms of collapse (C) or resurgence (R) after a crisis. In Fried's interpretation of May's theory, men, especially Icarian men, should receive higher C-scores, while women, especially sadomasochistic women, should receive higher R-scores. Instead, the Icarian males received the highest R-scores, explained by Icarians seeing the possibility of a second chance after failure. Icarian males also tended to create more dramatic crises and more spectacular endings. Fried draws the following conclusions from his study: (1) May's scoring system is inadequate; (2) results depend on the stimulus value of the particular cards; thus the phenomenon is not universal; (3) differences between Icarian and non-Icarian males are more significant than sex differences; however, women do tend toward more positive scores than do men.

In his 1971(b) rebuttal of Fried, May claims that Fried's selection of females was not based on Deutsch's theory but on other definitions of masochism. In addition, Icarians were selected partly on the basis of the same TAT stories used for measurement of patterns. Thus, his classifications are suspect. May also states that Fried's scoring of both systems is suspect, since there is no evidence of his obtaining a copy of May's scoring manual, and he offers no data as to the reliability of his own scoring system. Finally, May points out that TAT stories, as with any other fantasy or behavior, are products of both the person and the stimulus or situation so that it is expected that certain TAT pictures would be stronger elicitors of deprivation-enhancement patterns.

Despite the presence of studies which have not demonstrated the predicted gender difference, there is still enough evidence of the phenomenon to continue studying it. Most researchers in the area have subscribed to the psychoanalytic theory from which May's hypotheses were derived. However, it is not necessary to hypothesize that "feminine masochism" or male "Icarianism" cause the demonstrated difference. Bramante (1970) theorizes that such results may reflect "differing characteristic sources of anxiety in men and in women, with the basic female concern being seen as separation anxiety and the basic male concerns being seen as fear of merger and a consequent concern with loss of strength or of ego-control" (p.2273). Bramante goes on to state his belief that such differences in concern result from sex-role training

that is "neither biologically necessary nor socially inevitable." In her discussion of theories about women's masochism, Caplan (1984) points out that enjoying pain is different from enduring unpleasant events in order to get to better events. She cites arguments by Bernard and Chodorow that society pressures women to behave altruistically, especially in relation to their own families, and punishes them for behaving otherwise. As noted by many theorists (Miller, 1976; Schaef, 1981; Gilligan, 1982), society has taught women that happiness, fulfillment, and accomplishment can only be achieved through service, self-denial, and the giving of oneself; this belief is to some extent supported by women's experience in the world. Seen in this light, it is easy to see why women believe they must experience deprivation before reaching enhancement. Although May's modification of Murray's Icarus theory makes sense, there may be additional explanations of the phenomenon. Men may believe that happiness and fulfillment may be reached solely through "doing", but upon achieving "success" they may be faced with feelings of emptiness and boredom, a sense that something still eludes them. Men may also believe that the cost of happiness achieved through the creation of intimate emotional relationships and the experience of common human emotions is a loss of one's identity as a separate human being. Thus, the enhancement provided by such experiences may be believed to be inevitably followed by deprivation.

A number of researchers have elaborated upon the sex difference phenomenon by investigating variables which influence that difference.

In May's original (1966) study, he found that students preferring English were significantly more likely to receive scores in the predicted direction than those preferring mathematics. He later (May, 1975a) found that more positive D/E scores are obtained by persons with "hysterical" diagnoses, while negative scores are associated with "obsessive" diagnoses. Using a somewhat different scoring system, McClelland and Watt (1968) found that housewives tended toward higher positive D/E scores than female schizophrenics, whose scores were similar to those of employed women. Male schizophrenics tended toward more positive D/E scores than normal employed males. In a study of women, Saarni (1976) found that female introductory psychology students tended toward more negative D/E scores than female skilled workers. In addition, women with more education produced more negative D/E scores than those with less education. This finding for education may be related to Rabinovitz's (cited in May, 1980) discovery that negative D/E scores correlated with tending to overestimate one's ability to perform a task, while positive scores were related to underestimating one's chances.

Cramer and Carter (1978) investigated the relationship of fantasy patterns to defense mechanism clusters. Previously, certain defense clusters, such as Reversal (which includes negation, denial, reaction formation and repression) and Turning Against Self, had been found to be used more by females than males, while others, such as Projection and Turning Against Others, were more characteristic of males than females. Cramer and Carter found that women scoring high on Reversal had signifi-

cantly more positive D/E scores than women scoring low on that mechanism. Women scoring high on Turning Against Others, however, had significantly more negative D/E scores than those scoring low. Males showed similar nonsignificant tendencies on three defense clusters: males high on Turning Against Self and Principalization (which includes intellectualization, isolation, and rationalization) had more positive D/E scores than men scoring low on those clusters; however, males high on Projection displayed more negative D/E patterns than men scoring low on Projection.

Using the Gough Adjective Check List, Malmaud (cited in May, 1980) investigated the relationship of personality traits to D/E scores and found that high nurturance, succorance and endurance and low autonomy, exhibitionism, deference and need for achievement predicted more extreme positive patterns in women. Only high need for achievement predicted more extreme negative patterns in men. Her findings suggest that persons who exhibit sex-typed traits would be more likely to receive extreme D/E scores in the direction predicted for their gender. It is true that researchers using bipolar sex role scales have not generally found an association between scores on those and D/E patterns. This is true for the MF scale from the Strong Vocational Interest Blank (Cramer & Carter, 1978), the Rosenkrantz Sex-role Stereotype Scale and the Gough Femininity Scale (Saarni, 1976). Nonetheless, May's (1969) interviews with persons exhibiting more extreme D/E scores led to portraits of somewhat insecure men feeling pressure to assume a masculine role but

envying women their ability to depend on others, along with women who dislike the traditional feminine role but respond to pressure to conform to it. Both groups would probably tend to describe themselves as sex-typed in their behaviors, since they respond to societal pressure to do so.

Bramante's (1970) work gives some support to this idea. While he found no relationship between D/E scores and an unidentified "obvious masculinity-femininity scale" for women, he found a small positive relationship for men; that is, more feminine men tended to write stories in the expected "female" pattern. Interestingly, after watching a filmed love story these men tended to write stories in the "masculine" direction. Bramante generally found that subjects who watched a love story film, as opposed to a slapstick comedy, produced more intensified deprivation-enhancement patterns. Bramante interpreted this result as indicating that the subjects' sense of sexual identity was heightened through their identification with the characters in the love story. If this interpretation is correct, it is probable that other influences on one's sense of sexual identity may affect deprivation-enhancement patterns similarly. One such influence could be the gender of one's older siblings. It may be that same-sex older siblings encourage one to have a similar sense of sexual identity. In a test of this hypothesis, Johnson (cited in May, 1980) investigated the effect of older siblings and found that having an older brother predicted more negative D/E scores in men. He found no effect for women in his study.



Several researchers have explored the development of D/E patterns through studies of children. May (1971b) demonstrated the predicted gender difference in third, fourth, and fifth graders. Cramer and Bryson (1973) compared nursery, kindergarten, and first-grade children with those in the third, fourth, and fifth grades. A later study (Cramer & Hogan, 1975) compared three to six year old children with those aged 11 to 13 and obtained similar results. Although the younger children's scores differed in the predicted direction, the difference was nonsignificant for all but one picture. A significant sex difference was found for the older children. The authors found that these results were due to a change in the girls' scores and not in the boys' scores, since younger and older girls' scores differed significantly and boys' scores did not. Cramer and Bryson relate their finding to a 1957 study by Brown that showed that the sex role preference scores of boys did not change from kindergarten through fifth grade, while girls showed a dramatic increase in feminine preferences at the fifth-grade level. Fakouri (1979) replicated these findings by studying children of ages 5 to 9 years. Not until age 8 or 9 did a significant gender difference emerge.

### Hypotheses

The present study seeks first to replicate the deprivation-enhancement pattern sex difference phenomenon. As in previous studies, males' and females' D/E scores are expected to differ significantly, with males receiving negative scores and females positive scores. In

addition, factors which may relate to the gender difference phenomenon will be investigated.

First, expectancy for success will be investigated. Rabinovitz's study (cited in May, 1980) indicated that tending to overestimate one's ability to perform a task correlated with negative D/E scores, while underestimation was related to positive scores. Although Rabinovitz obtained her results by using a particular task, it is possible that similar results could be obtained using a scale measuring more generalized expectancy for success. It would seem that if one expects more success than could reasonably happen, some sort of "falling" or "deprivation" must eventually occur. On the other hand, persons who tend to expect less success will generally achieve more than they expect and may experience a later feeling of enhancement. Thus, a high score on the expectancy for success scale is hypothesized to be related to a low D/E score, while a low success expectancy will be expected to be associated with a high, or positive, D/E score.

Malmaud's (cited in May, 1980) finding that certain personality traits affect male and female deprivation-enhancement patterns differently will be investigated using a different measure, the Personality Research Form. Six traits, nurturance, succorance, endurance, autonomy, exhibition, and need for achievement, will be studied. Hypotheses will be consistent with the results obtained by Malmaud and can be supported theoretically as well. If women believe they must deny themselves in order to experience enhancement, it would follow that women holding this

belief most strongly would exhibit a low need for achievement. On the other hand, men believing that "doing" will secure their happiness would show a high need for achievement. Thus, high need for achievement in men and low achievement need in women are expected to predict more extreme D/E scores, in a positive direction for women but negatively for men. Along the same line, persons high in a tendency to nurture or succor others display a belief that attending to the needs of others rather than solely to the self will bring later satisfaction. Thus it is hypothesized that women, and perhaps men, high in nurturance and succorance will display more positive D/E scores. For the same reason, women (and perhaps men) with low autonomy and exhibition needs, which imply denial of the self's needs and a tendency to avoid being the center of attention, are predicted to obtain more positive D/E scores. Since endurance implies an ability to endure hardship on the way to later happiness, a high endurance need is expected to predict more positive scores in women and perhaps men.

Although studies have been mixed concerning the relationship of sex role typing to deprivation-enhancement patterns, such a relationship seems reasonable conceptually. Previous studies have explored such relationships using bipolar sex role scales. It may be that a non-bipolar scale such as the Bem Sex Role Inventory, which yields separate masculinity and femininity scores for each subject, will uncover a relationship. Theoretically, the traditional sex-typed, or feminine, role for women includes a belief that self-sacrifice and attending to others'

needs before one's own leads to fulfillment and happiness. On the other hand, masculine men are assumed to enhance their lives by focusing on work and their identity as separate from others. Thus, they expect more than can be reasonably reached. It is hypothesized in this study, therefore, that sex-typed individuals will obtain more extreme D/E scores than androgynous and undifferentiated persons, with women receiving positive scores and men receiving negative scores.

Finally, the effect of siblings will be investigated. Although Johnson's (cited in May, 1980) work found significant results only for men, theoretically women's siblings could be expected to affect them as well. If deprivation-enhancement patterns are influenced by society's teachings, then the modeling by same-sex siblings of behaviors and beliefs must affect those patterns. Thus, it is hypothesized that persons with more same-sex siblings than other-sex siblings will receive more extreme D/E scores than those with more opposite-sex siblings. In addition, persons with same-sex older siblings are expected to obtain more extreme D/E scores, positive for women and negative for men.

## CHAPTER II

### METHOD

#### Subjects and Procedure

The subjects for this study were 105 undergraduate university students, 54 female and 51 male. All were attending college at a Roman Catholic university in a large midwestern city. In exchange for volunteering for the study, they received credits toward an introductory psychology course. Both male and female subjects ranged in age from 17 to 22, with a mean age of 18.9 for the men and 18.6 for the women. The men and women did not differ significantly in racial background,  $\chi^2(4, N=100) = 4.10, ns$ , with the entire sample being 69% White, 11% Black, 9% Hispanic, 9% Asian/Oriental, and 1% Native-American. Five subjects, one male whose TAT stories were unscorable and four females who completed the Bem Sex Role Inventory incorrectly, were eliminated. This left a total of 50 males and 50 females for the final analyses.

After giving their written consent to participate in the study, the subjects, assembled in groups of up to 15 persons by the female experimenter, were informed of the procedure for writing TAT stories. Subjects were told that the procedure tested their imagination rather than their memory and were given four questions to use as a guideline for writing their stories:

Who are the people and what are they doing?

What events led up to what is happening in the picture?

What are the people thinking and feeling?

What will be the outcome of the story? How will it end?

The four TAT pictures were shown on slides in the order described in the following section of this paper. Each slide was displayed for 30 seconds, as timed by a stopwatch, after which it was removed during the 5 minutes the subjects were given to write each story. After 4 1/2 minutes had elapsed, the subjects were informed that they had 30 seconds to finish their story. At the end of the full 5 minutes, the subjects were told to stop writing, and a new slide was presented.

After the procedure for the fourth TAT picture was completed, the experimenter collected all four stories each subject had written. The subjects then completed four questionnaires in the following order: background information form, the six-dimension version of the Personality Research Form, the Hale-Fibel Generalized Expectancy for Success scale, and the Bem Sex Role Inventory.

#### Assessing Deprivation-Enhancement Patterns

Four Thematic Apperception Test pictures were used to elicit stories for deprivation-enhancement scoring from the subjects. The first picture, the one most commonly used for deprivation-enhancement scoring, shows a man and a woman in a trapeze act. The man hangs upside down by his knees from the trapeze, and the woman is depicted in midair. They are grasping onto each other's wrists. The second picture depicts two

women dressed in white laboratory coats. The woman in the background watches while the woman in the foreground handles the test tubes. In the third picture, two men are standing in front of a ship. One man wears a dark suit and has his back to the viewer and the other wears the uniform of a ship captain. The final picture portrays two people sitting next to each other on a bench. There is a river in front of them and a low bridge to the side. These four pictures have been employed in numerous investigations of fantasy patterns, including the assessment of human motives for achievement, power, and intimacy (McClelland, 1985).

The four TAT stories of each subject were scored for deprivation-enhancement patterns with the use of a scoring manual devised by Robert May (1975b). The following description of May's scoring system is taken from May (1966) and May (1975b).

The two general scoring categories are "deprivation" and "enhancement". Deprivation includes such things as physical tension or pain, injury, death, continued exertion, falling or losing control, growing old or weak, negative emotion, self-sacrifice without mention of gain or gratification, dissatisfaction, and failure. Enhancement refers to such things as satisfaction of physical need, accomplishment, growth, success, positive emotion, attention, rising or cessation of falling, positive anticipation, insight, and revenge.

A story is scored first by establishing an anchor point or "pivotal incident" within it. The pivotal incident refers to the dramatic turning point of the story, the central act or feeling which mediates

between the past and the future. After the pivotal incident is located, deprivation and enhancement units are numerically weighted according to whether they fall before or after the pivotal incident. A deprivation unit occurring before the pivotal incident is scored +1; one occurring after the pivotal incident receives a weight of -1. For enhancement, the weighting is reversed: those occurring before the pivotal incident each receive weights of -1; those occurring afterward are weighted +1. After all the units are weighted, the weights are summed into a total score for that story. Thus, a story containing one deprivation unit before the pivotal incident and one enhancement unit afterward would receive a score of +2. One containing one enhancement unit before the pivotal incident and one deprivation unit afterward, thus showing the opposite pattern, would receive a score of -2. If equal numbers of the same kinds of units occur on both sides of the pivotal incident, the story would be scored 0, since no movement will have occurred in terms of deprivation and enhancement. Thus, a story with all deprivation units, in equal numbers on both sides of the pivotal incident, would receive the same score as one containing no deprivation units and equal numbers of enhancement units on each side of the pivotal incident. In other words, the overall mood of the story is not important; it is the shift from one state to another that is measured.

In order to establish reliability, forty stories written to the same four pictures by subjects who were not taking part in the present study were independently scored by the experimenter and another rater,



resulting in a Pearson correlation reliability coefficient of .80. The independent rater, who was blind to the hypotheses of the study, then scored the 400 TAT stories for deprivation-enhancement. Each person's four D/E scores, one from each story, were transformed into an average score. Analyses were performed on both the four individual scores and the average score.

### Other Measures

Background Information Form. A form containing questions about gender, age, race, and siblings was constructed. The question about siblings yielded two independent variables. One classified the subjects into groups based on whether they had older siblings of the same sex only, opposite sex only, both, or neither. The other sibling variable was transformed into a difference score of the number of same-sex siblings minus the number of opposite-sex siblings.

Personality Research Form. The Personality Research Form (PRF; Jackson, 1967) is a self-report questionnaire which directs subjects to mark items true or false, according to whether they think given items describe them. The entire PRF yields 20 personality trait scores derived from Henry Murray's personality theory, along with two "validity" scales, Infrequency and Desirability. Construction of the scales began with generation of over 100 items for each scale, out of which items were selected on the basis of their high correlation with the total score and low correlation with other trait scores and the Desirability score. Items which appeared extreme were also eliminated.

Kuder-Richardson reliabilities of the various scales varied, but most clustered around .80 (Jackson, 1967; Anastasi, 1976). Factorial analyses corroborated the grouping of items into the 20 trait scales. The PRF scales also correlated appropriately with comparable scales in the California Psychological Inventory and the Guilford-Zimmerman Temperament Survey, thus supporting their construct validity.

For the present study, a shortened version of the PRF was constructed, containing 94 total items. Items measuring achievement, autonomy, endurance, exhibition, nurturance, and succorance were included.

Hale-Fibel Generalized Expectancy for Success Scale. The Hale-Fibel Generalized Expectancy for Success scale (GESS; Fibel & Hale, 1978) consists of the stem, "In the future I expect that I will...", along with 30 items concerning one's sense of general efficacy, work-oriented expectancies, and personal problem-solving in various areas of life, e.g., "be a good parent", "not make any significant contributions to society". Subjects rate items on a 5-point Likert-type scale. One total score is obtained.

The 30 items that make up the scale were chosen from a pool of 150 items based on their strong correlation with the total score and lack of correlation with the Marlowe-Crowne Social Desirability Scale. Split-half reliabilities ranged from .82 to .90 for females and from .83 to .91 for males. Correlations with measures of depression, such as the Beck Depression Inventory, the Beck Hopelessness Scale, and the Zung

Self-Rating Depression Scale, revealed that high GESS scores were related to fewer depressive symptoms and fewer feelings of hopelessness.

Bem Sex Role Inventory. The Bem Sex Role Inventory (BSRI; Bem, 1981) consists of 60 characteristics such as "compassionate" and "willing to take a stand", 20 of which are considered masculine, 20 feminine, and 20 neutral. Subjects rate the characteristics on a 7-point Likert-type scale according to whether they consider them true or untrue of themselves. Two scores, one for masculinity and one for femininity, are obtained. These scores can be analyzed as is and/or a median-split procedure can be employed to construct four groups: androgynous (high masculinity, high femininity), masculine (high-low), feminine (low-high), and undifferentiated (low-low). The BSRI treats femininity and masculinity as two independent dimensions rather than as two endpoints of a single dimension, as is true of other sex role scales. A sex-typed person is defined as one who is "highly attuned to cultural definitions of sex-appropriate behavior and who uses such definitions as the ideal standard against which to evaluate his or her own behavior" (Bem, 1981, p.4).

Items on the BSRI were selected from a pool of 200 items based on their ratings by undergraduates. These students were directed to rate the items on a 7-point Likert-type scale according to how they felt American society would rate them. Test-retest reliabilities for the finished scale were found to be, for women, .82 for femininity and .94 for masculinity, and for men, .89 for femininity and .76 for masculin-

ity. Research has shown that BSRI-defined sex-typed persons are more likely than androgynous or cross-sex-typed persons (feminine males and masculine females) to prefer sex-appropriate activities and to resist sex-inappropriate activities, even when it costs them money. In addition, sex-typed persons report more psychological discomfort and more negative feelings about themselves when they engage in cross-sex behavior (Bem & Lenney, 1976). Other studies (Bem, 1975; Bem, Martyna, & Watson, 1976) have shown feminine persons of both sexes to be low in independence and masculine persons, particularly males, to be low in nurturance.

In the present study, a median-split procedure was utilized to form the subjects into groups, but the original masculinity and femininity scores also served as independent variables in another part of the analysis. Groups were formed according to the medians reported for Bem's 1978 Stanford University undergraduate sample (Bem, 1981).

## CHAPTER III

### RESULTS

#### Sex Differences

Means, standard deviations, and ranges of the generalized expectancy for success total, the BSRI masculinity and femininity scores, the difference score of same- minus opposite-sex siblings, and the six scale scores from the PRF for males and females separately are presented in Tables 1 and 2. Table 3 displays similar statistics for the five dependent variables: deprivation-enhancement scores for the four TAT stories, along with the average D/E score derived from those scores. As can be seen, the means for all groups on all dependent measures are positive, contrary to May's theory, which would predict negative D/E scores for males. In addition, scores for the first picture, that used most often in deprivation-enhancement pattern research, are more positive for males than females, although not significantly. This result is apparently due primarily to the unusually high scores of two males, +10 and +12. A gender by sex-type by type of older sibling group (2 x 4 x 4) analysis of variance was performed on the data, using the average D/E score as the dependent variable. Neither the gender,  $F(1,53) = 0.43$ , ns, sex-type,  $F(3,53) = 1.31$ , ns, nor sibling,  $F(3,53) = 1.17$ , ns, main effects were significant. Two- and three-way interactions were

likewise nonsignificant. A similar multivariate analysis of variance was performed using the four actual D/E scores as dependent variables. Only the three-way interaction for the first picture was significant,  $F(7,53) = 2.19, p < .05$ . The value of this finding is doubtful due to the very small number of subjects in each cell. In summary, the hypothesis that the deprivation-enhancement scores of males and females would differ significantly, with females receiving more positive scores and males receiving negative scores, was not supported.

#### Predicting Deprivation-Enhancement Patterns

A series of multiple regression analyses were performed in order to determine how well variables measured in the present study predict deprivation-enhancement patterns and which of those variables, including gender, generalized expectancy for success, masculinity, femininity, the six personality trait variables, and the sibling difference score, are the best predictors. Five analyses, one for each individual D/E score and one for the average score derived from those scores, were performed on the data from three groups: the entire sample and males and females separately. Thus, a total of fifteen multiple regression analyses were generated. In all analyses, a significance level of .05 was used for entry into the model.

In analyses performed on data from the sample as a whole, gender was entered first, since theory indicated that it should be the most powerful predictor. Following this, the other variables were entered into the equation using the procedure "forward", which is described as follows:

TABLE 1

Means, Standard Deviations, and Ranges of Generalized Expectancy for Success, Masculinity, Femininity, and Personality and Sibling Variables for Males.

	Mean	SD	Range
Generalized expectancy for success	119.08	15.57	84-146
Masculinity	5.27	.86	3.55-6.95
Femininity	4.87	.64	3.70-6.25
Achievement	10.36	3.45	2-16
Autonomy	6.52	3.21	1-13
Endurance	9.84	3.60	1-15
Exhibition	8.96	4.53	0-15
Nurturance	10.08	2.41	5-14
Succorance	8.00	3.14	0-15
Sibling difference score	.24	1.56	-3 - +4
Number of brothers	1.47	1.23	0-4
Number of sisters	1.22	1.14	0-4

Note: Males' and females' scores on any variable did not differ significantly from one another.



TABLE 2

Means, Standard Deviations, and Ranges of Generalized Expectancy for Success, Masculinity, Femininity, and Personality and Sibling Variables for Females.

	Mean	SD	Range
Generalized expectancy for success	117.96	13.70	85-146
Masculinity	4.56	.90	2.60-5.95
Femininity	5.11	.68	3.35-6.05
Achievement	10.92	3.64	1-16
Autonomy	6.24	3.23	0-14
Endurance	9.72	3.22	2-15
Exhibition	8.68	4.34	1-16
Nurturance	11.42	2.05	7-15
Succorance	7.96	3.65	2-14
Sibling difference score	.20	1.35	-3 - +3
Number of brothers	1.10	.92	0-3
Number of sisters	1.31	1.19	0-5

Note: Males' and females' scores on any variable did not differ significantly from one another.



TABLE 3

Means, Standard Deviations, and Ranges of Deprivation-Enhancement Scores for the Entire Sample and Males and Females Only.

		Entire Sample	Males	Females
Picture 1	Mean	1.07	1.16	.98
	SD	2.80	3.23	2.31
	Range	-6 - +12	-6 - +12	-5 - +6
Picture 2	Mean	.69	.67	.71
	SD	2.83	2.56	3.09
	Range	-9 - +8	-6 - +6	-9 - +8
Picture 3	Mean	.91	.46	1.35
	SD	2.65	2.38	2.85
	Range	-6 - +7	-6 - +5	-5 - +8
Picture 4	Mean	.45	.19	.70
	SD	2.75	2.18	3.22
	Range	-6 - +10	-5 - +7	-6 - +10
Average score	Mean	.80	.67	.93
	SD	1.50	1.51	1.50
	Range	-3 - +4.25	-2.5 - +3.5	-3 - +4.25

Variables are entered one at a time. At each step, the independent variables not yet in the equation are examined for entry. The variable with the smallest probability-of- $F$  value is entered, provided that this value is smaller than the entry criterion and the variable passes the tolerance tests (SPSSX User's Guide, 1983, p. 604).

Results of the analyses for the entire sample can be found in Table 4.

The analyses for Pictures 1 and 2 revealed no significant predictors,  $F(1,92) = .10$  and  $F(1,91) = .005$ , both ns. The analysis for Picture 3 revealed succorance to be a significant predictor of deprivation-enhancement scores,  $F(2,93) = 4.17$ ,  $p < .05$ , with a multiple  $R$  of .29. Gender and succorance together accounted for only 8% of the variance. It is evident from looking at the beta weights of .17 and .23 for gender and succorance, respectively, that a high succorance score was associated with a more positive D/E score, as predicted. Although not significant, the gender variable was in the predicted direction, with women tending to receive higher D/E scores. In the analysis for Picture 4, only expectancy for success significantly predicted D/E scores,  $F(2,89) = 3.47$ ,  $p < .05$ . Gender and expectancy for success together accounted for only 7% of the variance (multiple  $R = .27$ ). The beta weights for gender and expectancy for success, .10 and .25, respectively, reveal that high expectancy for success was related to a higher D/E score, a finding contrary to that expected. A similar trend was revealed in the analysis of the average score, in which expectancy for success approached significance,  $F(2,80) = 2.42$ ,  $p < .10$ . In this case, gender and expectancy for success together accounted for only 5% of the variance, with a multiple  $R$  of .24 and beta weights of .10 and .22, respectively.

TABLE 4

Results of Multiple Regression Prediction of  
Deprivation-Enhancement Scores for Entire Sample.

	Variables Entered	Beta	Multiple R	F	p
Picture 1	Gender	-.03	.03	.10	ns
Picture 2	Gender	.00	.01	.00	ns
Picture 3	Gender	.17	.29	4.17	<.02
	Succorance	.23			
Picture 4	Gender	.10	.27	3.47	<.04
	Expectancy for Success	.25			
Average score	Gender	.10	.24	2.42	<.10
	Expectancy for Success	.22			

Note: Gender was entered first into the equation, after which the other variables were entered according to their relative contribution.

Multiple regression analyses were performed on data from males and females separately, using the "forward" procedure. Results of the 10 analyses are presented in Table 5. In three of the analyses of male data, those for Pictures 1 and 2 and the average score, no variables satisfied the statistical limits for entry. Analysis of the male data for Picture 3, however, revealed the sibling difference score to be a significant predictor of D/E scores,  $F(1,45) = 5.57$ ,  $p < .05$ , with a multiple  $R$  of .33. The sibling difference score accounted for 11% of the variance. As expected, men with more brothers than sisters tended to receive lower D/E scores ( $\beta = -.33$ ). Male D/E scores for Picture 4 were significantly predicted by expectancy for success,  $F(1,44) = 9.40$ ,  $p < .01$ . Expectancy for success accounted for 18% of the variance, with a multiple  $R$  of .42. With a beta weight of .42, it is evident that high expectancy for success was related to higher D/E scores, which was contrary to prediction.

In the case of women, three analyses, performed on data from Pictures 3 and 4 and the average score, revealed no significant predictors. The analysis for Picture 1, however, showed that nurturance, succorance, and autonomy significantly predicted D/E scores,  $F(3,42) = 6.11$ ,  $p < .01$ , and accounted for 30% of the variance (multiple  $R = .55$ ). High scores on all three predicted more positive D/E scores ( $\beta$ s = .31, .54, and .39, respectively). Although the result for autonomy is opposite of that expected, since low autonomy scores were predicted to correspond with high D/E scores, it would seem that it has an effect only

TABLE 5

Results of Multiple Regression Prediction of Deprivation-Enhancement Scores for Males and Females.

	Variables Entered	Beta	Multiple R	F	p
Males					
Picture 1	a				
Picture 2	a				
Picture 3	Sibling difference score	-.33	.33	5.57	<.03
Picture 4	Expectancy for success	.42	.42	9.40	<.004
Average score	a				
Females					
Picture 1	Nurturance Succorance Autonomy	.31 .54 .39	.55	6.11	<.002
Picture 2	Succorance	-.30	.30	4.43	<.05
Picture 3	a				
Picture 4	a				
Average score	a				

a

No variables satisfied the statistical limits for entry.

when independent of nurturance and succorance (autonomy - D/E score correlation = 0). Finally, succorance was found to be a significant predictor of D/E scores for Picture 2 stories,  $F(1,46) = 4.43, p < .05$ . Succorance predicted only 8% of the variance (multiple  $R = .29$ ). In contrast to the results for Picture 1, high succorance in this case was found to be related to lower D/E scores (beta =  $-.30$ ).

In summary, only two significant predictors emerged when male and female scores were combined. Succorance and expectancy for success emerged as positive predictors for Pictures 3 and 4, respectively. However, different patterns emerged when the sexes were considered separately. The expectancy for success finding was shown to be characteristic of males only. Succorance was not found to be a significant predictor of male D/E scores; instead, Picture 3 results suggested that men with more sisters than brothers received more positive D/E scores. On the other hand, only Pictures 1 and 2 led to significant predictors for females. For Picture 1, nurturance, succorance, and autonomy were all found to be positively related to D/E scores. Succorance was found to be negatively related to D/E scores for Picture 2. Generally, then, different predictors appeared to be important for males and females.

#### Relationships Among Variables

Pearson correlations (two-tailed) were performed on data from the entire sample, males only, and females only in order to discover how the variables utilized in the previous analyses relate to each other. The masculinity (masc), femininity (fem), generalized expectancy for success

(GESS), and sibling difference scores (sib), along with the six personality trait variables, achievement (ac), autonomy (au), endurance (en), exhibition (ex), nurturance (nu), and succorance (su), were subjected to these analyses. The results of the Pearson correlation analyses can be found in Tables 6 and 7.

Several variables correlated strongly with each other across groups. Expectancy for success correlated strongly in a positive direction with masculinity ( $\underline{r} = .60$  to  $.67$ ), achievement ( $\underline{r} = .50$  to  $.63$ ), and endurance ( $\underline{r} = .61$  to  $.62$ ). As might be expected, masculinity correlated positively with achievement ( $\underline{r} = .44$  to  $.53$ ) and endurance ( $\underline{r} = .48$  to  $.54$ ), and achievement and endurance correlated positively with each other ( $\underline{r} = .60$  to  $.78$ ). Masculinity also correlated positively with exhibition ( $\underline{r} = .51$  to  $.54$ ), which correlated more weakly with expectancy for success ( $\underline{r} = .24$  to  $.29$ ). Exhibition correlated moderately with achievement ( $\underline{r} = .37$ ) and endurance ( $\underline{r} = .31$ ) only in males, along with a trend toward a low positive association with autonomy ( $\underline{r} = .19$ ). As would be expected, masculinity correlated negatively with succorance ( $\underline{r} = -.24$  to  $-.27$ ) and displayed tendencies to weakly correlate positively with autonomy ( $\underline{r} = .20$  to  $.22$ ). Succorance correlated negatively with autonomy across groups ( $\underline{r} = -.62$  to  $-.64$ ) and with endurance ( $\underline{r} = -.32$ ) and expectancy for success ( $\underline{r} = -.27$ ) in women. Succorance also showed a nonsignificant tendency to correlate negatively with achievement in women ( $\underline{r} = -.21$ ).

TABLE 6

Pearson Correlations of Expectancy for Success, Masculinity, Femininity, and Sibling Difference Score With Each Other and With Personality Trait Variables for Entire Sample and Males and Females Only.

	GESS	Masc	Fem	Sib
Masc	.60***			
	.60***			
	.67***			
Fem	.24*	.14		
	.23	.07		
	.28*	.36**		
Sib	-.09	-.07	.03	
	-.13	-.18	-.21	
	-.05	-.01	.29*	
Ac	.56***	.44***	.11	-.05
	.63***	.53***	.03	-.13
	.50***	.48***	.15	.03
Au	-.03	.21*	-.32***	-.07
	-.12	.22	-.35**	-.01
	.07	.20	-.28*	-.15
En	.61***	.48***	.18	-.02
	.62***	.49***	.09	-.18
	.61***	.54***	.29*	.18
Ex	.27**	.51***	.05	-.09
	.29*	.53***	.01	-.18
	.24*	.54***	.11	.01
Nu	.23*	.14	.51***	-.07
	.35**	.26*	.53***	-.21
	.11	.31*	.43***	.12
Su	-.22*	-.24*	.28**	.00
	-.17	-.25*	.33**	.00
	-.27*	-.27*	.25*	-.01

Note: First row in each cell refers to data from entire sample, second row to data from males only, and third row to data from females only. All correlations are two-tailed.

\*p<.05    \*\*p<.01    \*\*\*p<.001



TABLE 7

Pearson Correlations Among Personality Trait Variables for Entire Sample  
and for Males and Females Only

	Ac	Au	En	Ex	Nu
Au	-.01 -.11 .09				
En	.68**** .60**** .78****	-.02 -.03 .00			
Ex	.20* .37** .05	.14 .19 .08	.19 .31* .04		
Nu	.32**** .43**** .18	-.15 -.17 -.11	.21* .24* .20	.32**** .47**** .19	
Su	-.18 -.13 -.21	-.63**** -.62**** -.64****	-.24* -.15 -.32*	-.08 -.17 .00	.13 .11 .18

Note: First row in each cell refers to data from entire sample, second row to data from males only, and third row to data from females only.  
All correlations are two-tailed.

\*p<.05    \*\*p<.01    \*\*\*p<.001

Interestingly, femininity also correlated positively with expectancy for success in women ( $\underline{r} = .28$ ), with a similar trend for men ( $\underline{r} = .23$ ). This may be partially due to the positive correlation between femininity and masculinity in women ( $\underline{r} = .36$ ). As might be expected, femininity was associated positively with nurturance ( $\underline{r} = .43$  to  $.53$ ) and succorance ( $\underline{r} = .25$  to  $.33$ ) and negatively with autonomy ( $\underline{r} = -.28$  to  $-.35$ ). In women, femininity was correlated positively with endurance ( $\underline{r} = .29$ ) and sibling difference scores ( $\underline{r} = .29$ ), the latter meaning that women with more sisters than brothers reported themselves to be more feminine. Men showed a nonsignificant tendency to be more feminine ( $\underline{r} = .21$ ) and more nurturant ( $\underline{r} = -.21$ ) if they had more sisters than brothers.

Some interesting results emerged with respect to the nurturance variable, particularly in males. Nurturance correlated positively with masculinity in both males and females ( $\underline{r} = .26$  and  $.31$ ) and with expectancy for success ( $\underline{r} = .35$ ) and achievement ( $\underline{r} = .43$ ) in males. In addition, positive correlations for men and positive nonsignificant tendencies for women were found between nurturance and exhibition ( $\underline{r} = .47$  and  $.19$ , respectively) and nurturance and endurance ( $\underline{r} = .24$  and  $.20$ , respectively).

## CHAPTER IV

### DISCUSSION

The most salient finding of this study is the failure to replicate a gender difference in deprivation-enhancement patterns. A gender difference did not emerge for the average D/E score taken from the four stories written by each subject nor was it apparent when the four D/E scores were examined separately. In addition, gender was not a significant predictor of D/E scores as examined through multiple regression analyses. In only one analysis, that for Picture 3, did gender exhibit a nonsignificant trend in the expected direction, although even then gender accounted for less than 3% of the variance. D/E scores ranged widely for both men and women, and all means were positive, indicating that both men and women tended to write stories that began with deprivation material and ended with enhancement material.

Certain other variables did emerge as predictors of D/E scores, however. When the entire sample was examined, succorance and expectancy for success were the surprisingly best predictors. Although expectations were supported by the finding that D/E scores became more positive with higher succorance scores, high expectancy for success was consistently found to be associated with high D/E scores, a result opposite to that hypothesized. It would seem that this finding directly contradicts

that of Rabinovitz (cited in May, 1980), who determined that overestimation of one's ability to perform a task was associated with low D/E scores, while underestimation was related to high D/E scores. The following may help to explain the apparent contradiction. Subjects in Rabinovitz's study were asked to project expectations concerning a particular task, while the present study asked subjects to complete a written questionnaire dealing with their expectations about many different aspects of life, including marriage and parenting, work, social relations, and general optimism. It would seem that estimates on one task may not be a measure of one's expectancy in general. In addition, it may be that answering a future-oriented questionnaire positively may correspond to a tendency to see "enhancement" material as occurring later, possibly after less positive events, or "deprivation", have occurred. Thus, a high generalized expectancy for success could be expected to correlate with the "deprivation preceding enhancement" pattern, or a more positive D/E score.

Multiple regression analyses of the sexes separately yielded different findings for each. Interestingly, significant predictors were found on Pictures 1 (trapeze scene) and 2 (laboratory scene) for females only, while male data yielded significant predictors for Pictures 3 (ship captain scene) and 4 (bench scene) only. This finding suggests the possibility that D/E scores are best measured by different stimuli for males and females. However, most of the previous studies have utilized Picture 1 to generate stories. This, and the fact that male D/E

scores were unusually high in the present study, suggests that the males of this sample may be different from previous samples in some way.

A look at Malmaud's (cited in May, 1980) research may be helpful. Malmaud asked her 50 subjects to generate stories from the trapeze card, Picture 1 in the present study. She failed to find a significant gender difference due to her males' having unusually high D/E scores (male mean = +1.39, female mean = +1.75). Her subjects also behaved atypically on the Gough Adjective Check List, in that the women's scores exceeded the men's on the needs for achievement and dominance scales. In the present study, D/E scores for Picture 1 were also atypical, in that the male mean (+1.16) exceeded the female mean (+.98). A look at the distribution of male D/E scores for that picture reveals that most ranged between -6 and +7, similar to the women's scores for the same picture and to scores for other pictures. Two scores, +10 and +12, appear to be responsible for driving up the male mean, since without those scores the mean is +.74, which is more in line with the other pictures. A significant gender difference still does not emerge but the direction is as predicted by theory. Unlike Malmaud's research, however, in this study male and female scores on the various independent variables were not significantly different. It is difficult to explain away the higher-than-normal male D/E scores, especially with the presence of other studies which have failed to replicate the gender difference in college students. Rabinovitz (cited in May, 1980), for example, found nearly identical male and female D/E scores for her sample of 246 subjects.

Still, it is possible that all three samples, in Rabinovitz (cited in May, 1980), Malmaud (cited in May, 1980), and the present study, share a common dimension that contributed to their similar D/E scores. The fact that all three obtained positive scores, indicating a "deprivation preceding enhancement" pattern, makes this likely. Future studies will need to assess whether a problem exists in the theory or the scoring system or whether as yet undefined factors change male fantasy patterns from "enhancement preceding deprivation" to "deprivation preceding enhancement".

Aside from the issue of whether males and females exhibit different deprivation-enhancement patterns, it is evident that different personality and background variables emerge as predictors for each sex, at least as measured in the present study. High nurturance and succorance were found to predict higher D/E patterns for Picture 1, as expected. Autonomy was also found to predict in the positive direction when its dependence on the other two variables was removed. This result was unexpected, given Malmaud's (cited in May, 1980) previous finding that low autonomy correlated with high D/E scores. A look at the way autonomy was related to other variables, however, is useful. Autonomy, as measured by the PRF, did not significantly correlate with expectancy for success, achievement, exhibition, or masculinity. Autonomy did, however, inversely correlate strongly with succorance. It would seem that autonomy, as measured here, does not exert a consistent influence.

A look at the analysis for Picture 2 reveals a finding that is difficult to explain. Unlike the previous picture, high succorance scores predicted lower D/E scores in women. Although both nurturance and succorance correlated strongly in a positive direction with femininity, they were not found to be significantly related to each other. This may indicate that they do not always exert influences in a similar fashion.

The multiple regression analyses for males revealed two predictors to be significant, expectancy for success and the sibling difference score. The positive finding for expectancy for success has been discussed previously. The sibling difference score behaved as expected; that is, men with more brothers than sisters tended to receive lower D/E scores. This finding is similar to that of Johnson (cited in May, 1980), who determined that males with older brothers exhibited more negative D/E patterns. Interestingly, the gender of one's older siblings did not demonstrate an impact in the present study for men or women. Since the two sibling variables were calculated differently, it is natural to suppose that it is the number rather than the presence of one's older siblings that may make the difference. It is also possible that the presence of more brothers of all ages exerts more impact than the presence or number of older brothers. Future research should attempt to delineate the importance of each and develop stronger measures of the impact of siblings.

Finally, the finding that sex role typing did not predict deprivation-enhancement patterns must be discussed. Neither masculinity nor femininity were revealed to be significant predictors. In addition, persons classified as masculine, feminine, androgynous, and undifferentiated did not differ in their deprivation-enhancement patterns. Questions have been raised concerning the adequacy of the BSRI as a measure of sex typing (Spence & Helmreich, 1981), but since other measures, the MF scale from the Strong Vocational Interest Blank (Cramer & Carter, 1978), the Rosenkrantz Sex-Role Stereotype Scale and the Gough Femininity Scale (Saarni, 1976), have shown no impact on D/E scores, it may be, as May (1971a) and others (Cramer & Carter, 1978) have claimed, that obvious sex role scales measure something different than that measured by D/E scores. Given the present study's failure to replicate a significant gender difference, however, such conclusions should not be taken too far.

Some previous researchers (McClelland & Watt, 1968; May, 1971a; Cramer & Carter, 1978) have asserted that D/E scores measure unconscious gender identity. Such researchers believe that three levels of sex-role identity exist. At the most superficial level lie a person's interests which are products of culture, at a deeper level lies a person's style of approach to life, characterized by such behaviors as assertiveness or dependence, and at the deepest level lies one's "gender identity, an unconscious schema representing pride, confidence, and security in one's membership in the male or female sex" (McClelland & Watt, 1968, p. 237).



Although such an explanation is intriguing, no evidence to support it has been presented besides the lack of correlation between D/E scores and obvious sex role scales. It is the opinion of the present author that further research needs to more definitely delineate the difference between deprivation-enhancement patterns and sex typing behaviors and interests before looking for a more unconscious link. In fact, given the mixed findings concerning the predicted gender difference, researchers need to substantiate the adequacy of May's deprivation-enhancement scoring system and discover under what conditions gender difference predictions may not hold up. May's (1971b) assertion that fantasy patterns are like any other behavior and thus are dependent upon their eliciting stimuli does not seem to be enough to explain the highly disparate results found among stories written to different TAT pictures in the present study. May's (1966) argument that stories from certain pictures are simply easier to score and thus show stronger results is weakened by the present study's finding that different significant predictors emerged for the four pictures utilized. Stories across the four pictures appeared to be qualitatively different from one another.

If one accepts for the moment the adequacy of May's scoring system, the finding that women tended to write stories in a "deprivation preceding enhancement" pattern can be explained by either May's (1966) version of Deutsch's (1944) "feminine masochism" theory or by the model outlined earlier that argues that females are taught that they must practice self-sacrifice and self-denial if they are to be happy and

accomplished. The latter explanation would seem to be more parsimonious.

The male results are more difficult to explain. It is possible that the scoring system does not adequately reflect the "Icarian syndrome". Fried (1971) would argue that the Icarian pattern would show a resurgence after the "enhancement preceding deprivation" pattern. It may be that a scoring system reflecting that pattern would achieve a more consistent gender difference. On the other hand, it is possible that the "Icarian syndrome" describes the experience of fewer men than previously supposed or that men do not follow that pattern as consistently as women follow theirs. Further work is needed to examine these possibilities.

In conclusion, there does appear to be some merit to the concept of deprivation-enhancement patterns, although some modifications may be in order. Ideas for researching these patterns in the future have been stated throughout this paper. Additionally, researchers might go beyond the study of children and college students and determine how these patterns are reflected in the fantasy productions of older persons, both middle-aged and elderly. It is clear, however, that the present study does not support the idea of different thinking patterns in males and females. It would be tempting to conclude that differences do not exist or are not large enough to be important, but such a thought must be tempered by the knowledge that others have found such differences. It may be that May's scoring system, or even the concept of deprivation-en-

hancement patterns, is not the most accurate measure of thinking patterns.

In the introduction to this paper, theories suggesting the existence of gender differences in world views or "reality systems" were discussed. Such theories have just begun to be tested. It would seem that the answer lies in developing new methods of operationalizing these theories in order to say more positively that the sexes do or do not perceive their experiences differently. Supposition about and investigation of the differences between males and females are old, established habits, yet definitive conclusions still elude us. It is to be hoped that with continued effort and openness to a variety of views about how the sexes function we will move closer to the truth.

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## APPROVAL SHEET

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

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

2 August 1985  
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