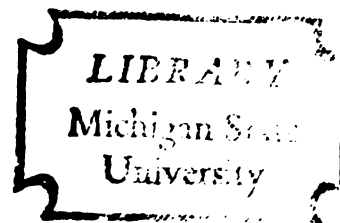


SEX DIFFERENCES IN SELF-ESTEEM
AS A FUNCTION OF ASSIGNED
MASCULINE AND FEMININE
CHARACTERISTICS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
SANDRA LYNN WHITAKER
1972



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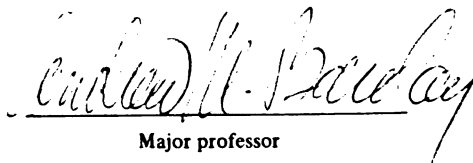
SEX DIFFERENCES IN SELF-ESTEEM AS A FUNCTION
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ISTICS

presented by

Sandra Lynn Whitaker

has been accepted towards fulfillment
of the requirements for

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ABSTRACT

SEX DIFFERENCES IN SELF-ESTEEM AS A FUNCTION OF ASSIGNED MASCULINE AND FEMININE CHARACTERISTICS

By

Sandra Lynn Whitaker

Seventy-two male and female students at Michigan State University participated in a two-session investigation of self-esteem. Session I, labeled "Personality Assessment", determined the subjects' basic self-esteem and their conceptions of masculine and feminine characteristics. In Session II, subjects received a "psychological evaluation" allegedly based on the results of the personality assessment tests taken in Session I. Subjects were randomly assigned to a "masculine evaluation" condition, a "feminine evaluation" condition, and a no evaluation condition. Post-evaluation measures of self-esteem were also obtained by administering the (1) California Personality Inventory (CPI), Self-Acceptance (SA) and Social Presence (SP) scales; and (2) Janis and Field Inadequacy Scale.

As was predicted, males receiving a masculine evaluation increased in self-esteem on the Janis and Field and SA scales; but, contrary to prediction, did not decrease in self-esteem

on receiving a feminine evaluation. Similar predictions for females were also generally confirmed. Orthogonal comparisons revealed that females receiving a masculine evaluation increased in self-esteem but remained unaffected both with a feminine evaluation and under control conditions. An unexpected decline in self-esteem for both, males and females, in all conditions, was observed when using the SP scale of the CPI. These contradictory results were explained on the basis of the closer item-content similarity between the Janis and Field scale and the SA scale of the CPI. The possibility of item-sampling error was also considered.

On all scales males had higher self-esteem than females but attained statistical significance only in the SA and Janis and Field scores.

The development of a clearer conceptualization of self-esteem and of more valid measuring instruments was suggested.

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By
Sandra Lynn Whitaker

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1972

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This dissertation is dedicated to all those women who have overcome great obstacles and fulfilled their educational aspirations, particularly those who function as heads of their households.

It could not have been written without the assistance of many people, and to them I express my thanks and appreciation: to Drs. Lawrence A. Messé, Frank L. Schmidt, and Ellen Stromen, members of my thesis committee, for their guidance and helpful suggestions; to Dr. Andrew Barclay, Chairman of my thesis committee, for his competent help and encouragement; and to Drs. Robert L. Raisler and Fred Helsabeck for their assistance with the statistical computations. Of invaluable service were my psychology students, who assisted in running the experiment and tabulating the data; Ms. Holly Haddock, who worked diligently to meet deadlines in typing the first draft; and Mrs. Shirley Goodwin, who typed the final copy. I thank them for their cooperation.

My friends Muriel Rokeach and Robert and Annie Sandberg sustained me with their encouragement and inspiration. My son, Rick, accepted the necessity of a part-time mother without complaint and with great pride.

To all of these I wish to express my feelings of deep gratitude and appreciation.

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I. PROBLEM

Self-esteem has become an important concept in the field of psychology. Its impact on everyday behavior has been pointed out by a considerable number of investigators who view man's regard for himself as responsible for a wide range of everyday behaviors. This range of behaviors varies from ability to give and receive love (Rogers and Dymond, 1964), to the ability to resist pressure to conform (Janis, 1954), to the ability to resist dishonest behavior (Graf, 1971), and even to better visual acuity (Veldman, 1970). Persons with higher self-esteem are viewed as happier individuals, more creative, realistic, more likely to assume an active role in social groups and more capable of achieving their own personal goals (Coopersmith, 1967).

At the same time that the benefits of higher self-esteem are so loudly acclaimed, the beliefs of differential feelings of worth between the two sexes are also strongly indicated (Bardwick, 1970). Women are thought of as having lower self-esteem than men. By implication, they either fail to enjoy personal characteristics needed for success in our society, or they possess these qualities to a lesser degree than men. This notion is not too different from Freud's ideas of women, expressed as early as 1927. Freud reported,

"Women show less sense of justice, are less willing to submit to the great necessities of life, and are more often influenced in their judgement by feelings of affection and hostility." (Freud, 1927)

Some evidence for these reported sex differences in self-esteem are found in the work of Smith (1939), Sheriffs and McKee (1957), and McKee and Sheriffs (1959), and Rosenkrantz et al. (1968). On the other hand, a more recent investigation (Lanza, 1970) failed to show significant sex differences in self-esteem.

There are two possible explanations for the lack of consensus on the reported sex differences in self-esteem. The first explanation has to do with conceptual difficulties and measuring problems. The second explanation deals with social changes that have taken place since 1968 when the last study showing sex differences in self-esteem was reported (Rosenkrantz et al., 1968)

One of the difficulties common to most studies on self-esteem is lack of a common definition among the authors. Conceivably, we may be talking about different results in the measurement of self-esteem when indeed different concepts are being discussed. In most cases, an actual definition is totally lacking and assumption of the variables involved is often made on the basis of the measuring instrument in use. However, since not all studies use the same instrument, comparison between the different studies is not

possible, and if it is made, it cannot be considered valid. Of the work done in this area, only the series of investigation conducted by Sheriffs and McKee (1957, 1959) use the same measuring instruments. For this reason, the lack of sex differences in self-esteem reported by Lanza and found by this investigator (Whitaker, 1971) could be attributed either to the instrument used or the population sampled. Since all other investigators have also used college undergraduates, the possibility remains that the differences in results obtained are due to using different instruments.

The second explanation for the different results obtained when comparing college men's and women's self-esteem is based on recent social movements demanding equality between the sexes. It is possible that the most recent investigations reflect actual changes taking place in our college population. College groups are particularly sensitive to social movements, and if we were to judge by vocalizations and demonstrations, our college female students have become increasingly aware of a redefinition of their roles and responsibilities as members of our society. This redefinition of roles of necessity involves a reappraisal of the self and the attribution of different personality characteristics more congruent with the new roles.

The theoretical orientation reflected in this interpretation is the Mead (1934)--Cooley (1902) symbolic interaction position which asserts that one's perceptions of the

attitudes that significant others hold towards one's self shape one's self-approval. In the case of the female college population, the significant others are personal close friends, other peer groups, and even teachers, who voice belief in equal human rights and sex equality. Our college campuses are presently witnessing role changes manifested not only in similar outward appearances but also in similar behavioral expectations of both sexes. At least on a conscious level, our college students deny holding sex-role stereotypes and our college women no longer seem particularly flattered when told they are passive, emotional, and "filled with sugar, spice, and everything nice."

As pointed out by Coopersmith (1967, p. 31) in terms of Mead's formulations, the gauge of self-evaluation is a mirror image of the criteria employed by the important persons in our social world. Society has assigned women customarily to the least important occupations such as domestics, clerks, secretaries, and, at the highest level to positions of nurses and school teachers. Together with these "typical" female occupations, women have been ascribed personality characteristics suitable to the performance of their duties. In contrast to the characteristics of logical, stern, aggressive, self-confident, and independent (ascribed to men), women have been unanimously described by both sexes as being sentimental, submissive, softhearted, and dependent (Sheriffs and McKee, 1957). It is apparent that the latter personality

characteristics are not conducive to behaviors which will in turn be rewarded by a society that values achievement, competition, and unique contributions. Members of society who are perceived by others as lacking personal characteristics conducive to success will think of themselves as actually being inferior. This feeling of inferiority apparently shared by many members of the female population finds expression in the frequently heard comment, "I am only a house-wife." Even motherhood, the most characteristic female occupation, is no longer accorded the position of importance it once held when our society was more agricultural and women occupied a more central position.

If, in the past, women college students viewed themselves as lacking the personality attributes, ordinarily ascribed to men, but needed to succeed in the professional and occupational world, their expressed attitudes towards the self would reflect the lesser social value attributed to them by their own social group. If, on the other hand, our female college students presently view themselves as sharing with men similar personality characteristics, conducive to behaviors that lead to success in our society, their expressed self-esteem would reflect the equal social value accorded to them by their group. While in the former case, we would expect to find sex differences in self-esteem, in the latter case, no differences in self-esteem would be expected.

The purpose of this investigation was to study sex differences in self-esteem as a function of masculine or feminine characteristics ascribed to each subject by a relevant member of his society. Specifically, it was expected that women assigned masculine characteristics would gain an increase in self-esteem. No significant changes in self-esteem were expected when each sex was assigned the personality characteristics stereotypically ascribed to his or her own sex.

II. RELATED RESEARCH

There are basically four lines of overlapping research related to this investigation. The first one is a direct attempt to verify the interactionist view that the individual's self-perceptions are, to a large extent, determined by what others believe about him. The second one represents a controlled manipulation of the individual's self-esteem by means of positive and/or negative feedback of his performance on a specific task. The third line of research is concerned with the early origins of self-esteem. This work, done with children, studies the parents' descriptions of their children, and the parents' behavior towards their children. These data are then correlated with the children's descriptions of themselves, and on occasion the descriptions of how they would like to be. The fourth line of research provides indirect evidence of the effect of the appraisal of others on the self-esteem. This work consists of a series of studies on sex-roles, men's and women's beliefs, ideals, and self-concepts. Of the four sets of studies found in the review of the literature, this group is the only one that emphasizes the sex variable. The studies comprising the other three lines of research mentioned above either had an all

male population, or when using mixed groups, rarely considered sex differences as their main focus.

A. The Interactionist View

The view that man's self-appraisal is a reflection of what others think of him is clearly in accordance with the writings of Cooley (1902), Head (1934), Newcomb (1950), Rogers (1951), Sniggs and Combs (1949). Direct empirical evidence comes primarily from the work of Manis (1955) and Miyamoto and Dornbusch (1956).

Miyamoto and Dornbusch tested some basic assumptions of the interactionist view of the self and self-conception. These authors hypothesized 1) that self-definitions are shaped by the influence of others, 2) that more than the actual responses of the others, it is the perceived responses of others that influences self-definitions, 3) that the self takes the role of the "generalized other." The "generalized other" (Mead, 1934) refers to the individual's conception of the organized social process of which he is a part. This organized social process is composed of numerous specialized roles; the individual identifies his own role in it and so fulfills his part in enabling the organized process to continue.

Subjects in this study consisted of 10 groups of undergraduate students. Intelligence, self-confidence, physical attractiveness and likableness were measured on a 5 point

scale. Instructions were given to regard the middle of the scale as the "average" for the group. Each subject was asked to give four ratings for each of the experimental variables of the study: himself, other members of his group, his perception of the way other members of his group would rate him, and his perception of the way society at large would rate him. The responses yielded four indices: "self-conception", "actual responses of others", "perceived responses of others", and the "generalized other." Analysis of the data was not done by the usual statistical test of significance, but by inspection of gross differences and consistent tendencies observed from group to group. Based on the 10 groups and four characteristics measured, a hypothesis was considered to receive perfect support when the expected results were obtained 40 times. Twenty supporting tests were interpreted as lending no more than chance success. For each of the characteristics measured, the data were divided into high and low self-ratings. It was thought that if, indeed, the appraisal of others reflected on the self-concept, the actual responses of others would be higher for those subjects with a higher self-rating than for those with a lower self-rating. This hypothesis was supported not only for the actual responses but also for the perceived responses of others. A further breakdown of the data into the four characteristics measured showed greater consistency between self-conceptions and perceived responses of others than when

the actual responses of others were considered. Table 1 shows the breakdown of personality characteristics and the frequency with which self-ratings tended to be closer to the mean perceived responses than to the mean actual responses of others to the subjects.

TABLE 1

Miyamoto and Dornbusch's Data on Mean Perceived Responses of Others as Compared to Their Mean Actual Responses

Characteristic	Hypothesis Supported	Hypothesis Not Supported	Tie
Intelligence	8	2	0
Self-confidence	9	0	1
Physical attractiveness	10	0	0
Likableness	<u>7</u>	<u>3</u>	<u>0</u>
Total.....	34*	5	1

*Frequency of support (40 would mean total support--there being 10 experimental groups and 4 characteristics).

A comparison of the perceived responses of others in the subjects' small groups and the perceived responses of others in society at large ("generalized other") showed self-ratings corresponding more closely to the "generalized other" in 3 out of 4 characteristics which seems to be equally influenced by the responses of others in both a relatively small group and other divergent groups.

TABLE 2

Miyamoto and Dornbusch's Data on the Mean Responses of Others in Society at Large as Compared to Their Mean Responses in the Subjects' Small Groups

Characteristic	Hypothesis Supported	Hypothesis Not Supported	Tie
Intelligence	10	0	0
Self-confidence	5	4	1
Physical attractiveness	10	0	0
Likableness	<u>10</u>	<u>0</u>	<u>0</u>
Total.....	35*	4	1

*Frequency of support (40 would mean total support--there being 10 experimental groups and 4 characteristics).

The results obtained in this study lend empirical support to the symbolic interactionist view of self-perception. However, these results must be accepted with a caution and awareness of the possible restrictions imposed by a rather unsophisticated analysis of the data, as well as by some implied assumptions built into the design of the study. Data in this study were reported in terms of the frequency with which a given hypothesis was "supported", but the actual magnitude of the subject's responses was not given. This lack of information regarding magnitude of responses, together with the omission of statistical test of significance make it rather difficult to assess the validity of the reported results. Furthermore, even if these results were accepted as valid, the point must

be made that the interactionist theory is essentially a dynamic theory and that Miyamoto and Dornbusch concentrated on the static consequences of the individual's previous experiences. The assumption was also made that the way the subject perceives himself at a point in time and the way others perceive him at that particular point are causally connected and that one is indeed responsible for the other.

Manis (1955) designed a study taking into account the time variable. He postulated that self appraisals are affected by the appraisal of others, and that self-conceptions are no different than any other set of attitudes, opinions, or beliefs collected by an individual about any given object or topic. Drawing from the work of Festinger and his associates he formulated the following five empirical hypothesis:

- 1) Over a period of time there will be an increase in agreement between the individual's self-perception and his friends' perception of him.
- 2) Over the same period of time, there will be a greater agreement between an individual's self-concept and his non-friends' views of him.
- 3) During the same period of time, the content of an individual's self-concept will be more influenced by his friends' view of him.
- 4) Within the same period of time, any changes of opinions the individual's friends have of him will tend to increase the agreement between his self-concept and his friends' perception of him.
- 5) During the same period of time, an individual will be

more successful in influencing his friends to accept his self-concept as valid than he will be in similarly influencing the opinions of his non-friends.

Manis used as subjects male freshmen who at the beginning of the study had known each other as roommates for a period of five weeks. They rated each other twice, once at the beginning of the experiment and six weeks later, by means of 24 bi-polar scales. These scales were derived from Cattell's factor analysis (Cattell, 1950) of Allport and Odbert's trait list which is supposed to sample most of the important descriptive dimensions on which people within our culture vary. The subjects rated themselves, their "ideal self", and others in their group. At the same time, sociometric choices of the members of the group were taken in order to obtain information regarding each subject's "friends" and "non-friends". The person or persons most frequently mentioned by each subject were considered his friends, while those least frequently mentioned were considered his non-friends. Splitting the data into friends and non-friends permitted a selective measure of each subject's perceptions of others and the influence that his preferred and non-preferred members in his group might have had on his own self-appraisal. The two administrations of the scales made it possible to study changes in self-appraisal over a period of time, a situation more realistic in terms of inter-personal relations and the changes that may actually take place in daily life.

Another important variable considered in Manis' study, and ignored in the previously discussed study by Miyamoto and Dornbusch, was the quality of the self-appraisal as compared to the opinion of others, friends as well as non-friends. The term "positive subject-friend (or non-friend)" was used to describe the case when the subject's original opinion of himself was higher than the one others held of him. These subjects were considered as having a "relatively favorable" self-concept. A subject with an opinion of himself lower than the one others had of him was considered as having a "relatively unfavorable" self-concept; the term "negative subject-friend (or non-friend)" was then used.

When the data from the first administration of the scales were analyzed, the results of this study showed the subject's self-appraisal to be affected by the opinion of others only in the case of "positive subject-friend" (Wilcoxon's Signed Rank Test, $p < .05$) these included both friends and non-friends. In the case of "negative subject-friend", the opinion of others did not seem to significantly affect the subject's self-appraisal.

Over a period of time, when the results of the first and second administration of the scales were compared, it was found that the individual's self-appraisal was significantly affected by the opinion of others ($p < .01$) when they were his friends and perceived him in a more ideal light than he perceived himself. The "friend's" opinion did not significantly

affect the subject's self-concept when his opinion was unfavorable. Analysis of the "non-friends" data once more showed the subject's self-appraisal to be affected, when the opinions were flattering, and unaffected when their opinions were unflattering. When the relative influence of the subject's friends and non-friends was compared, the results showed the friends to be more influential in determining the subject's own appraisal ($p < .05$). This was particularly true in the case of negative opinion from others.

The above results validate the "looking glass" derivation of the self-concept advanced by Cooley and Mead (1949). They also add some refinement to the theory regarding the quality of self-perceptions and the perceptions of others. According to these results, subjects with a lower self-concept have a more difficult time incorporating the opinions of others, particularly when the opinions are negative. However, with the passage of time, this apparent resistance seems to weaken and others' opinions seem influential, particularly when they come from those they perceive as friends. Those with an initially high self-concept seem to be more open to the opinion of others, disregarding source (friends or non-friends). In every case, those perceived as friends are more influential than the non-friends in determining the subject's appraisal of himself.

The results shown in this study demonstrate some differential influence of others in shaping one's self-concept.

However, the converse is not found to be true--one's own opinion of himself does not influence others' opinion of him. On the basis of this, it seems that an individual is unable to "convince" others of the validity of his own self-appraisal. This one-way influence negates Manis' original assumption that self-conceptions are no different than any other set of attitudes.

When compared with the work of Miyamoto and Dornbusch, Manis' study shows two improvements: 1) the measure of self-conceptions over a period of time (not a fixed point in time), and 2) the measure of a larger number of characteristics (not only limited to four as in the Miyamoto and Dornbusch study). In spite of these improvements, neither of the two studies really demonstrates that "others' reactions" are necessary antecedent conditions to self-ratings. They only make inferences from their findings that the individual's self-conceptions are influenced by his associates' perceptions. Videbeck (1960), considered in the next section, was the first investigator to test the interactionist's hypothesis in a more direct fashion by experimentally varying the reactions of others and observing subsequent changes in self-ratings.

B. Evaluation and Performance

Studies in this group are generally concerned with changes in self-esteem as a function of others' evaluations of the subjects' skills. The common design used is the pre-post test

design with the experimental manipulation between the tests. Other sub-areas of specific concern in these studies are the direction of change in self-esteem, the magnitude of this change, and the spread of change in self-esteem to other closely related and unrelated areas.

Haas and Maehr (1966) demonstrated not only that upward changes in self-esteem follow success and downward changes follow failure, but also that these changes are relatively enduring. A study by Sharma (1956) also found this effect. The studies of Haas and Maehr (1965), Maehr et al. (1962), Diggory (1966), Rothman (1963), and Cetlin (1964), all give evidence for radiation or spread of effect. In general, the findings indicate that the specific ability manipulated shows the greatest change. Related, non-tested abilities will show smaller changes, and the subjects' evaluations of very unrelated activities will show an even smaller change. On the basis of these findings, it can then be said that any evaluation of a person's skills, or parts of his personality, will to some extent affect his total conception of self. The work of Videbeck (1960) is an example of this type of research.

Videbeck postulated that the evaluations of others affect an individual's self-ratings responses on a specific scale, provided that certain factors are kept under control. The most important of these factors are: 1) a repeated number of reinforcements of either approval or disapproval, 2) the credibility of the "expert" making the evaluation, 3) the

relevance that the evaluated skill or attribute has for the individual, 4) the intensity with which the approval or disapproval is expressed by the "expert." Keeping these factors under control, Videbeck (1960) formulated the following hypothesis: 1) If another person reacts approvingly towards the individual with reference to some specified attribute, then the subject will change his actual self-rating in regard to this attribute to a point closer to his ideal self-rating; but if the other reacts disapprovingly, the subject's change of his self-rating will be to a point further away from his ideal self-rating. 2) If disapproving reactions do not substantially differ from approving reactions, except for the element of negation, then there will be no difference in absolute amounts of change in self-rating between subjects reacted to approvingly and disapprovingly with reference to a given attribute. 3) If another person reacts approvingly or disapprovingly to the qualities of an individual referred to in one scale, and if, as a result, the individual changes his self-ratings on that scale, he will also change his self-ratings on other scales. He will change them to the extent that the attributes of these other scales are functionally similar to the evaluated attribute.

As may be inferred from these hypotheses, Videbeck was concerned with testing the direction of change of the self-evaluation, the amount of change, and the spread of effect.

The subjects used in Videbeck's experiment were superior students in a speech class. They all had the same training and level of competence and were highly motivated to do well. They were told that they were going to participate in an experiment to determine whether men or women were better in certain forms of oral communication. In the experimental session, each read six poems and after each reading, systematically received an "expert's" approval or disapproval. The evaluative reactions were standardized statements which the "experts" read as if they were their own comments. They were identical in wording for all subjects except for evaluative terms, such as "good", "poor", "succeeded in", "failed to", etc. The experts were previously trained to read with the same tone and voice intensity. By having highly motivated students, and consistently creditable evaluations, Videbeck managed to keep under control the important factors mentioned above.

Before and after this evaluative manipulation, the subjects evaluated themselves on 24 items. Eight of these items were called the "critical items" because they were the closest to the criteria used in the alleged evaluations of the "experts." The other eight items were similar to these items but were not reacted to by the expert. These were called "related items." The remaining eight items dealt with oral communication in general social situations, such as leading a discussion group and were called "unrelated items" because they were substantially less similar to the "critical items" than were the "related items."

The results confirmed the hypotheses made regarding the direction of change and the spread of effect. As predicted, a person will rate himself closer to his ideal self-rating if he receives approval and further away from his ideal self-rating if he receives disapproval. Also as predicted, the reactions of others tend to have generalized effects upon self-ratings. However, the degree of generalization diminishes as the scales become functionally dissimilar, with the gradient of change for the disapproval treatment being steeper than the gradient for the approval treatment. Videbeck found that, contrary to predictions, there was an absolute amount of change in self-ratings between subjects reacted to approvingly and subjects reacted to disapprovingly, even when the content of both evaluations was the same, except for the element of negation.

Similar findings were reported by Graf (1971) who produced changes in his subjects' self-esteem by using the same evaluative content, expressed in positive terms for one group and negative terms for the other.

Shrauger et al. (1970) studied the effects of success and failure feedback on a performance task in high and low self-esteem subjects. They found that high self-esteem subjects performed better following success feedback, and low self-esteem subjects performed worse following failure feedback. There were no significant performance changes for the high self-esteem subjects receiving failure feedback and the

low self-esteem subjects receiving success feedback. This kind of experiment is interesting from a cognitive consistency point of view. It is only regrettable that sex comparisons were not made to determine whether there were any functionally different reactions to success or failure or significant differences in self-esteem.

C. Children's Studies

Another line of research to evaluate the effect of the appraisal of others on the individual's self-conceptions comes from research done on children and their parents. The most common procedure in these studies has been to ask the parents for ratings and personality descriptions of their children. The children are also questioned about the perceptions they have of their parents, of themselves, and the perceptions they think their parents have of them. (Jourard and Remy, 1955, Helper, 1958). Additional information has been obtained by correlating the child's self-esteem with some parental behavioral variable such as rearing practices, emotional support, over-protectiveness, punitiveness, hostility, or interest of the parents for their children (Coopersmith, 1967, Rosenberg, 1963).

Jourard and Remy (1955) questioned college students on their satisfaction with themselves and their bodies (self and bodycathexis) as well as on the opinions they thought their parents had of them. Relatively high and positive correlations

(.56 to .70) were found between the college students' self-evaluations and their reported parental evaluations.

One weakness of this study is that systematic distortion of data may have occurred when information regarding the parents' perceptions of their children was obtained from the children and not directly from the parents.

Helper (1958) questioned parents and children directly. Working with eighth and ninth graders, he asked each child subject to rate his actual self and his ideal self. Similarly, each of the parents was asked to rate his child as he ordinarily thought of him and as he wanted him to be. Helper used as his measuring instrument 46 seven-point bi-polar scales of personality descriptions and obtained four basic scores: (1) Child's Favorability Score--parents' actual ratings of their children on 15 items considered by judges to be the most desirable out of the 46 total items of the instrument; (2) Self-Favorability Score--children's own ratings on these 15 items; (3) Self-Acceptance Score--children's actual-ideal discrepancy scores on the remaining 31 items of the total 46 bi-polar scales; and (4) Child-Acceptance Score--the actual-ideal discrepancy score of parents' views of their children on these 31 items. Favorability Scores were considered to be mere descriptions but Acceptance Scores were thought to reflect parental attitudes towards their children and children's attitudes towards themselves.

Table 3 (Helper, 1958, p. 192) shows the correlation obtained between Favorability and Acceptance scores.

TABLE 3

Parent-Child Correlations (Rho) for Two Measures of Evaluation of the Child

	Boys			Girls			All Ss		
	N	Favor- ability	Accept- ance	N	Favor- ability	Accept- ance	N	Favor- ability	Accept- ance
Fathers									
Favorability	20	.44*	.26	30	.26	.06	50	.32**	.11
Acceptance	20	.18	.42*	30	.28	.44**	50	.31**	.37**
Mothers									
Favorability	21	.20	.10	30	.33	.18	51	.22	.08
Acceptance	21	.29	.08	30	.15	.39**	51	.16	.27*

*Coefficient reaches .10 level, two-tailed test.

**Coefficient reaches .05 level, two-tailed test.

Helper's data shows parental descriptions (Favorability Scores) to have little effect on children's self-acceptance. Attitudes of parents toward their children (Acceptance Scores) seem to have a significantly greater effect on the children's self-acceptance, particularly the daughters' self-acceptance. In contrast to girls, boys seem to be influenced only by their fathers' attitudes towards them and not by their mothers' judgments of them.

According to these results, it seems possible that the mothers' perceptions of their sons, and the sons' perceptions

of themselves, are functionally different from the mothers' perceptions of their daughters, and the daughters' perceptions of themselves. Here again, it is regrettable that no more is known about functional differences in the relations between parents and children of the opposite sex. Part of the reason for this lack of knowledge is that most of the investigations of the antecedents of self-esteem have been conducted with all male populations. Coopersmith's (1967) well-known series of studies on the antecedents of self-esteem is a good example of the lack of concern for the sex variable shown by many of the investigators.

Coopersmith studied 82 boys and their parents. The parents, particularly the mothers, responded to a questionnaire and were submitted to a two and one-half hour interview. During the interview, they were intensively questioned about family background, parental characteristics, child characteristics, early experiences in the life of the child, degree of acceptance of the child, discipline practices, democratic procedures used in the home, and degree of independence given to the child. Evidence for the appraisal of others in the formation of the child's self-esteem was provided for only in an indirect manner. Coopersmith concluded his studies indicating that affection, setting of behavioral limits, and freedom within these structures were probably the main factors responsible for children's high self-esteem (Coopersmith, 1967, p. 236). Sears (1970), using sixth graders, also found

parental affection an important variable in self-esteem.

A comparison of both sexes showed girls as having lower self-esteem.

However, as we shall see sex differences in self-esteem are not limited to the childhood years but persist in adulthood.

D. Sex Roles and Self-Concepts

This line of research has investigated the attitudes both men and women have towards each other; the way they view themselves; the way they would like to be; and the way they think other men or women would like them to be. A comparison of the different responses has provided a measure of stereotypes as well as a measure of self-esteem. The latter has been obtained by comparing what the individual thinks he is (the "real self") with what he would like to be (the "ideal self"). The closer these measures are to each other, the higher one's self-esteem.

The most common methodological approach in these investigations has been to present the subjects with a list of adjectives and ask them to indicate those adjectives which characterize men and those which characterize women. At other times, the subjects are asked to check each adjective in the list and assign each to males or females. The former is called the "unforced procedure", the latter, the "forced choice" procedure. McKee and Sheriffs (1957) believe both

procedures produce the same kind of results. The only difference reportedly has been that fewer characteristics are assigned to either sex under the "unforced choice" procedure; however, content of the characteristics assigned to both sexes is very similar.

Selection of items for the adjective check-lists has been done in two ways. One procedure has been to use adjective check-lists previously prepared by other authors. The other procedure has been to ask the subjects for adjectives appropriate for each sex. While some authors have used all the characteristics obtained, others have included only those characteristics assigned the majority of the time to either sex.

In 1953, Jarrett and Sheriffs attempted to construct a scale which would show individual differences in attitudes towards males and females. Despite the fact that their scale contained 17 items which had been judged neutral, and despite the fact that half of the items in each category were judged "favorable" and half "unfavorable", their scale not only showed significant sex differences in attitude but also a systematic preference for males on the part of both men and women.

Jarrett and Sheriffs' unexpected findings prompted a series of three investigations conducted by Sheriffs and McKee (1957, 1950) to study whether or not there is indeed a difference in the degree to which members of the American

TABLE 4

Adjective Check List: Unforced Choice

	Favorability Toward		Difference in Favor of Males		
	Males (1)	Females (2)	Total (3)	Favorable Adjectives (4)	Unfavorable Adjectives (5)
Men Subjects.....	+28.96***	+22.58***	6.38*	5.96*	.42
Women Subjects.....	+33.26	+22.02***	11.24**	3.90*	7.34***
Difference between subjects (M-W)	- 4.30	+ .56	-4.86	+2.06	+6.92***

TABLE 5

Adjective Check List: Forced Choice

	Favorability Toward		Difference in Favor of Males		
	Males (1)	Females (2)	Total (3)	Favorable Adjective (4)	Unfavorable Adjective (5)
Men Subjects.....	+17.32***	-14.36***	31.68***	24.14***	7.54*
Women Subjects.....	+19.50***	-18.70***	38.20***	16.48***	21.72***
Difference between subjects (M-W)	- 2.18	+ 4.34	-6.52	+7.66*	+14.18***

*p < .05

**p < .01

***p < .001

population esteem men and women. The first investigation (McKee and Sheriffs, 1957) comprised three independent studies. Each of these studies used undergraduate male and female students, members of an introductory psychology class, for its experimental population. Also, each used a different method and assessed a different aspect of self-esteem.

The first study obtained ratings on the overall worth of men and women. This was done by means of two scales: a six-point scale and a seven-point scale with a neutral point. Each scale contained the following statements: 1) Women are greatly superior to men, 2) Women are somewhat superior to men, 3) Women are a trifle superior to men, 4) Women and men are essentially equal, 5) Men are a trifle superior to women, 6) Men are somewhat superior to women; 7) Men are greatly superior to women. (Statement 4 was omitted when using the six-point scale.) To control for order of presentation, half of the subjects received scales beginning with the statement "Women are greatly superior to men" and the other half received scales beginning with the statement "Men are greatly superior to women." The results showed a significantly greater number of subjects thinking more highly of males than females. These data were particularly evident when using the six-point scale where there was no neutral point. A more egalitarian attitude was obtained when using the seven-point scale because that scale gave the subjects the opportunity to

take a neutral stand ($p < .001$). In spite of this opportunity, however, a significant preference for males was evidenced.

The second study gathered information on the perception of members of each sex towards each other. Subjects were again 50 men and 50 women members of an introductory psychology class. Using both forced- and unforced-choice procedures, they were asked to check on Sarbin's 200-adjective check list (Sarbin, undated) those characteristics which are in general true of men (or women). Each adjective in this list had been previously rated by 50 men and 50 women, from another introductory course, in terms of desirability or undesirability as applied to men or to women. Each adjective was classified as favorable or unfavorable on the basis of its median rating as applied to men and as applied to women. Male judges rated 104 adjectives favorable to men and 104 as favorable to women. Female judges rated 99 as favorable to men and 98 as favorable to women. A subject who, for example, checked 48 favorable adjectives about men and 17 unfavorable ones was scored .31 as far as his evaluation of men was concerned. The same applied to the evaluation of women.

The results using both forced and unforced procedures were very similar (Tables 4 and 5). Both men and women assigned a significantly larger number of favorable adjectives to males than to females, and a significantly larger number of unfavorable adjectives to females than to males (Tables 4 and 5, column 4 and 5). Partiality towards males

was even more pronounced when using the forced choice method. The extent of this preference was shown by the negative "favorability towards" means obtained for the females (Table 5, column 2).

A partial explanation for these findings may be attributed to the construction of the instrument and the instructions received. Sarbin's adjective check-list contains an approximately equal number of favorable and unfavorable adjectives. Therefore, unless the subjects select an equal number of favorable and unfavorable adjectives for both men and women, a negative number for one of the two sexes might be expected. This is particularly true when subjects are given the instructions to check all adjectives as belonging to one or another of the two sexes.

Granted the above considerations, the data obtained by both procedures revealed a bias against women. Men and women subjects were more favorable than unfavorable to themselves and both were significantly more favorable to males than to females.

This latter finding confirms the results obtained by Jarret and Sheriff (1953) and provides additional information that females look at themselves with even less regard than the males do. As a matter of fact, women, but not men, ascribed a significantly larger number of unfavorable adjectives to females than to males and a greater number of favorable adjectives to the males than to themselves. The number

of favorable adjectives women assigned to men was significantly greater than the number of favorable adjectives men assigned to themselves.

The third study obtained further information on men's and women's perception of each other by using the open-end procedure. By using this method the subjects were not bound to a given group of characteristics but were free to use those characteristics they felt were most descriptive of men and women. This was the procedure used by Jarrett and Sheriff (1953) in their pioneer study. Fifty-five men and fifty-four women undergraduates were asked to "list ten behaviors and characteristics of men and ten behaviors and characteristics of women." A few days later, the same group of subjects rated as favorable, neutral, or unfavorable, the same descriptive list of male and female characteristics. Each description was given a score based on the difference between the number of positive and negative ratings it received. The results were the same as the ones obtained when using the forced and unforced-choice procedures, with both sexes favoring males ($p < .001$). The same favorability towards males was observed when the authors and two graduate assistants rated the adjectives and when a clinical psychologist did the ratings. In all cases, both men and women wrote lists which were significantly more favorable to males than to females. The data also revealed women as more extremist in their ratings, assigning a greater number of extremely high or extremely

low values to the items they rated.

The second investigation conducted by these authors (Sheriffs and McKee 1957) was designed to make a qualitative examination of the characteristics which men and women ascribed to each other and to themselves. It was expected that the content of the self-concepts of men and women would reflect the differences in self-esteem demonstrated in the first investigation.

The procedure used in this second investigation was basically the one employed in the first study, except that the subjects also checked every adjective they felt was characteristic of themselves (Sarbin's list). Stereotypes were defined as differences in the frequency with which adjectives were ascribed to men and women. This definition eliminated adjectives that were ascribed to both ~~sexes~~ equally, even though they may have been ascribed with rather high frequency. It also lead to the inclusion of infrequently mentioned adjectives.

A content analysis of the characteristics ascribed to each sex, by means of both forced- and unforced-choice procedure, showed the stereotypes of men to reflect three general notions: (1) a straightforward, uninhibited social style; (2) rational competence and ability; and (3) action, vigor, and effectiveness. "Men's vices seemed limited to mild exaggerations of their desirable characteristics" (Sheriff and McKee, 1957, p. 452). The only negative

characteristics attributed to men by themselves were "selfishness, prejudice, and greed". In contrast of these findings, the negative characteristics attributed by women to themselves could well be summed up by the term "neurotic". Their favorable characteristics indicated: (1) social skills and grace; (2) warmth and emotional support. It is interesting to point out that both sexes ascribed to women a total of only 21 favorable characteristics. Men received a total of 30 favorable characteristics. The open-end procedure yielded similar results. Men were viewed by both sexes as ascendant, independent, forceful, unemotional, confident, responsible, and having good cognitive processes. Women were viewed by both sexes as subordinate, dependent, unforceful, emotional, irresponsible, and having good manners and poor cognitive processes. The assigned stereotypes in this investigation agreed very closely with the stereotypes Terman (1936) and Mead (1949) reported more than a decade ago.

In the light of these results, it seems appropriate to repeat comments previously made. Women fail to show characteristics needed for success in our competitive society; consequently, if the worth of the individual is partly determined by his successes and partly by what others think of him (her), it stands to reason that women should have a lower regard for themselves and think of themselves as being inferior.

It could be argued that the answers here obtained do not necessarily reflect what the individual thinks about himself. This possibility is discarded when considering the results obtained by each individual's description of himself. When the subjects described themselves as individuals, it was the women, and not the men, who agreed more, not only with each other, but also with the stereotypes. Whether these results indicate a real difference between the sexes in heterogeneity of personality, or greater conformity on the part of the women, or greater indoctrination of women in our society, or even different cognitive processes between men and women, is difficult to tell. The only clear fact is that, at the time of the investigation, college female subjects thought of themselves as being inferior to men, and more similar to each other.

The third investigation conducted by McKee and Sheriff (1959) came closer to studying men's and women's self-esteem. The instrument used in this study was once more Sarbin's adjective check-list. This time, four cards, each containing the 200 adjectives, were presented to each of 100 single men and 100 single women undergraduate students. They were given the instructions to check on the first card those adjectives which described what they would ideally like to be. On the second card they were asked to check those adjectives which described themselves as they really were. On the third card they were asked to check those adjectives which

described their ideal women (man for female students), and on the fourth card they were instructed to check adjectives which they thought described the ideal man for women their age (for men, the ideal woman for men their age). The responses to the four cards respectively yielded the following measures which constituted the basic data for this study: "the ideal self", the "real self", the "ideal member of the other sex", and "belief". Each adjective received a score based on the frequency of subjects who chose it. The results of this investigation showed women describing themselves ("real self") in more unfavorable terms than the ones they used in their description of men. Women described the kind of person they would like to be ("ideal self") by using more masculine than feminine characteristics. For example, adventurous, ambitious, and individualistic are characteristics chosen by both men and women to be stereotypic of men, and yet the majority of women chose these adjectives for their "ideal self". Men selected for themselves some of the stereotypic female characteristics, such as warm and sympathetic; however, as a whole, they rejected the female characteristics, particularly those displaying affect or sentiment such as affectionate, lovable, sentimental, sensitive, and soft-hearted. Women's descriptions of what men want of them ("beliefs") comprised a greater number of feminine than masculine characteristics. On the other hand,

men believed women want them to have not only what society alleges to be masculine, but also much of what is considered feminine.

What men and women believed members of the opposite sex wanted of them was congruent with reality. In describing the "ideal member of the opposite sex" women selected favorable female characteristics as frequently as they selected favorable masculine characteristics. Women wanted their men to retain their masculine characteristics but at the same time to acquire some of the female characteristics, especially those oriented towards interpersonal relations and expression of human feelings. Men described their ideal woman as having less masculine characteristics than women in their descriptions of men allowed them to have feminine characteristics. Men did not want their women to possess characteristics traditionally considered basically masculine. They were "action, vigor, achievement, and effectiveness". These personality attributes (not wanted by men in their women) are precisely the characteristics needed for success in the competitive business or academic worlds.

McKee and Sheriffs' investigations were followed by a study designed by Rosenbrantz et al. (1968) to examine the relationship between self-concepts and differentially valued sex-role stereotypes. A stereotype questionnaire was developed by obtaining from college undergraduates lists of behaviors, attitudes, and personality characteristics which

most strongly differentiated men from women. A total of 122 items were obtained and arranged in bi-polar scales with the poles separated by 60 points. Another group of subjects (74 men and 84 women) were instructed to imagine they were going to meet a person for the first time and the only thing they knew in advance was that the person was an adult male (or an adult female). Where would the person fall on each of the bi-polar scales? Another set of instructions asked the subjects to go through the 122 items and mark what they themselves were like. Social desirability for each of these scales was determined through another college undergraduate sample which indicated the pole of the scales representing the more socially desirable behavior.

The results obtained regarding the stereotypes of men and women were very similar to the findings of Jarrett and Sheriffs (1953) and the investigations of Sheriffs and McKee (1957, 1959). Males and females showed consensus in the stereotypes they had of men and women. In terms of social desirability, both sexes considered male attributes to be significantly more desirable. The self-concepts of men and women were also very close to their respective stereotypes. These results reflected women's lower regard for themselves as opposed to men's higher feelings of self-worth. As stated by Rosenkrantz et al. (1968, p. 293) "the factors producing the incorporation of the female stereotypes along with

negative variations into the self-concept of the female subjects must be enormously powerful." The importance of finding these factors, possibly among the historical, social, and educational areas cannot be overstressed.

This review of the literature clearly indicated self-esteem to be influenced by the appraisal of others--particularly by friends, parents, or "experts". It also showed that changes in self-esteem occur under two different conditions--the evaluation of one's performance in a particular task or skill, and the evaluation of one's personality.

Evaluations of personality, however, have focused on general characteristics while sex-typed characteristics have been ignored. Sex-typed characteristics are close to the individual's self-concept, since from very early age they are learned as an integral part of one's own identity. Studies on the effect on self-esteem of the appraisal of others are incomplete without a systematic analysis of the effects that male and female evaluations have on our men and women.

The main purpose of this investigation was to provide further information on self-esteem by manipulating the individual's personality--not only his whole personality but his own identity--in terms of masculine and feminine characteristics. Personality feedback was given to the subject by an "expert" (a psychologist) who used in his appraisal those

characteristics that the subject himself had perceived as being clearly masculine or feminine characteristics.

The second purpose of this investigation was to check for basic sex differences in self-esteem. It was of interest to this investigator to see if the reported differences in self-esteem, noted throughout this review of the literature, still continued to exist. The possibility was considered that some changes may have occurred during the past few years when equal rights and sex equality became salient issues in the social scene, particularly on the college campuses. Two measures of self-esteem were obtained because it was thought that having these measures would add to the validity of the results and would contribute toward establishing construct validity for the California Personality Inventory, an instrument used by this author in a previous study and commonly used by other investigators in the form of a psychological evaluation.



III. HYPOTHESES

Two sets of hypotheses were developed. The first set dealt with basic sex-differences in self-esteem and the validity of the self-esteem instruments used in this investigation (CPI and Janis and Field). The second set of hypotheses dealt with differential effects of masculine and feminine evaluations on measurements of self-esteem.

First Set of Hypotheses:

- 1) No sex differences in self-esteem will be found in either or both measures.

This hypothesis was based on recent investigations where no sex-differences in self-esteem were found (Lanza, 1970, Whitaker, 1971) and on most recent social developments leading to higher status for women in our society.

- 2) There will be a significant positive correlation between measures of self-esteem.

This hypothesis was based on Hamilton's (1971) study of self-esteem measurement instruments where the CPI and Janis and Field were found to be positively and highly correlated.

Second Set of Hypotheses:

- 1) Females receiving a "masculine evaluation" will experience a significant increase in their self-esteem.

- 2) Males receiving a "feminine evaluation" will experience a decrease in their self-esteem scores.
- 3) Females receiving a "feminine evaluation" will experience no change or decrease in self-esteem scores.
- 4) Males receiving a "masculine evaluation" will experience no change or an increase in their self-esteem scores.

IV. METHODS

A. Subjects

The subjects were undergraduate students taking an introductory Psychology course the Spring term of 1972. Seventy-two males and seventy-two females participated for class credit.

B. Measures of Self-Esteem

There were four measures of self-esteem--2 pre- and 2 post- derived from the California Personality Inventory (CPI) and the Janis and Field Personality Questionnaire.

The CPI was devised by Gough (1969). It consists of 18 scales, two of which have been widely used as measures of self-esteem. The CPI, Social Presence (SP) and Self-Acceptance (SA) scales have been found to correlate highly with several commonly used methods of measuring self-esteem, .67 with the Janis and Field Questionnaire and .58 with other self-rating measures (Hamilton, 1971). According to Hamilton, these two scales and the Janis and Field Questionnaire "clearly form a cluster and seem to be tapping the same attribute" (Hamilton, 1971, p. 449).

For this study the SP and SA scales were used in a split-half fashion, half as a pre-manipulation measure and half as a post-evaluation measure of self-esteem. Gough (1969) reported test-retest correlations of .80 for the SP scale and .71 for the SA scale using an all-adult male population. Using male and female high school students the reported coefficients were more modest, .63 for the females and .60 for the males in the SP scale; .71 for the females and .67 for the males in the SA scale. Splitting of the two scales seemed justified in our investigation dealing with group, not individual, differences.

The Self-Appraisal Questionnaire (Part I) (See Appendix A). This questionnaire was constructed by using 17 items from the SA scale, 28 items from the SP scale, 25 filler-items, and 19 items from the CPI Femininity Scale (~~Fe scale~~).

A word seems in order concerning the use of the CPI Fe scale. This scale measures masculinity or femininity interests with high scores indicative of more feminine interests. Inclusion of this scale took place after considerable thought and many reservations. Because of its own construction (Gough, 1960) the femininity scale reflects traditional sex-roles stereotypes. Consequently, a high score in this scale would only show how much a subject conformed to female societal expectations at the time the scale was developed, i.e., before 1956. On the other hand, it was felt that the

kind of items it contained added credibility to a "measure of personality" (pre-tests) and to an "Interest Inventory" (post-test) used to obtain pre and post-manipulation measures of self-esteem. Another justification for the inclusion of the Fe scale was the possibility that the additional information obtained may be of help in the interpretation of the experimental results.

The "Cattell's Interest Inventory" (Appendix B), an instrument used as one of two post-evaluation measures of self-esteem, was constructed in the same manner as the "Self-Appraisal Questionnaire" Part I. It consisted of 17 SA items, 28 SP items, 25 fillers and 19 Fe items. The twenty-five fillers were carefully worded to produce the impression occupational preference was being measured.

The Janis and Field Personality Questionnaire was originally devised by Janis and Field (Hovland, 1959, pp. 300-305) in connection with their studies on the personality correlates of persuasibility. It contains 9 scales, but only one, the Feelings of Inadequacy Scale, measures self-esteem. This scale is customarily referred to as the Janis and Field Self-Esteem Questionnaire. It is considered a good measure of self-esteem and has been widely used by several investigators. It is also one of the five measures of self-esteem studied by Hamilton (1971) and it is the one that showed the highest correlations with the SA and SP scales of the CPI.

The scale is 23 items long. In this study, one item (No. 17) was randomly selected and thrown out to keep the number of items even and to insure an equal distribution of items for the pre and post evaluation measures of self-esteem. Splitting of the items was justified by a reported split-half-reliability of .83 (Hovland et al., p. 58).

The "Self-Appraisal Questionnaire (Part II) (Appendix A) was used as the other pre-measure of self-esteem. It was constructed by taking 11 odd numbered items from the Janis and Field "Feelings of Inadequacy" scale and 9 filler items randomly selected from the remaining 8 Janis and Field scales.

The "Raymond's Job Preference Questionnaire" (Appendix B) became the second post-measure of self-esteem. It was constructed by using 11 even numbered items of the Janis and Field "Feelings of Inadequacy" scale, and 9 filler items. These fillers were selected from the Edwards Personal Preference Schedule (Edwards, 1954) to add credibility to the pretense of using it as a job preference questionnaire.

C. Measures of Stereotypes

Of primary importance in this investigation was establishing perceptions of men and women held by the experimental population. This was done by means of some of the adjective bi-polar scales used by Rosenkrantz and co-workers in previous investigations (Rosenkrantz et al., 1968, Rosenkrantz and

Vogel, 1968; Broverman, Broverman, Clarkson and Rosenkrantz, 1970). As shown in the review of the literature (p. 29) Rosenkrantz used these scales with college students to examine the relationship between their self-concepts and sex-role stereotypes.

The "Others Appraisal Scales" (Appendix C), which was used to measure stereotypes was comprised of 82 scales taken from the original 122 scales developed by Rosenkrantz et al. They were sent to this investigator by their author with the information that they had been selected by "judges"--176 women and 198 men, ranging in age from 17 to 59.

Stereotypes were established by computing the frequency with which male and female subjects assigned a characteristic as being more masculine than feminine or vice versa. Statistical significance of the frequencies was obtained by means of Z scores. A Z score of 3 or above was considered significant at the $p < .001$ level (Siegel, S., 1956, p. 41).

Table 6 (see p. 47) shows the personality characteristics most frequently expected of men by both males and females. Since we are dealing with bi-polar scales, it is understood that the converse of these characteristics represents what was most frequently expected of women by both males and females.

D. Psychological Evaluations

Part of the design of this study required giving masculine and feminine evaluations to both male and female subjects.

TABLE 6

Male Sex Stereotypes as Perceived by Male and Female Students

Item No.	Description of Characteristics	Male Responses		Female Responses	
		f	Z*	f	Z*
1	Aggressive	62	6.96	71	9.08
6	Independent	60	6.49	63	7.19
10	Objective	52	4.60	56	5.54
13	Not easily influenced	58	6.01	58	6.01
17	Dominant	56	5.54	67	8.14
20	Not at all excitable in a major crisis	59	6.25	53	4.83
21	Not at all excitable in a minor crisis	60	6.49	58	6.01
24	Active	52	4.60	55	5.31
26	Blunt	53	4.83	55	5.31
29	Competitive	55	5.31	58	6.01
32	Worldly	55	5.31	58	6.01
36	Not kind	47	3.42	60	6.49
38	Feelings not easily hurt	61	6.72	67	8.14
44	Can make decisions easily	67	8.14	58	6.01
48	Doesn't cry easily	61	6.72	69	8.61
49	Almost always acts as a leader	59	6.25	59	6.25
50	Not easily worried	48	3.66	58	3.66
55	Self-confident	55	5.31	55	5.31
56	Feels very superior	55	5.31	60	6.49
58	Not at all uncomfortable about being aggressive	58	6.01	61	6.72
63	Little need for security	60	6.49	55	5.31
66	Able to separate feelings from ideas	54	5.07	59	6.25
77	Not affectionate	59	6.25	49	3.89

*All these Z scores were significant at a $p < .001$ level.

Two standard, masculine and feminine, evaluations were constructed using 21 most frequently assigned personality characteristics (Table 6) plus 4 neutral characteristics. The latter were those characteristics which both male and female subjects thought equally applied to men and women. They were included in both the masculine and feminine evaluations to increase the credibility of the psychological reports. The four neutral items were: "poor sense of humor", "not conventional", "objects when things around are not clear", "practical".

Appendix D shows the masculine and feminine evaluations given to both male and female subjects.

E. Procedure

In Session I the subjects received a battery of tests as part of an experiment labelled "Personality Assessment". In Session II the subjects were given a "psychological evaluation" allegedly based on the results of the personality assessment tests taken in Session I.

Session I took place in a large hall. This experimenter together with four proctors (two males and two females) distributed to the subjects a manila folder containing three psychological tests: "Self-Appraisal Questionnaires I and II" and "The Others Appraisal Scales". The first two booklets contained the CPI (SA and SP scales) and Janis and Field "Feelings of Inadequacy" scales, both used as pre-measures of

self-esteem. The third booklet contained Rosenkrantz's measure of stereotypes.

The subjects were given a code number on a 3 x 5 card with the instructions to keep it for future reference. The same code number appeared in the manila folder and the psychological tests.

Below are the instructions given to the subjects prior to taking the tests:

"Open your folders; when you are told to start answer the questions of booklet I, the Self-Appraisal Questionnaire, Part I. There are 89 questions in this questionnaire. Make sure all of these questions are answered in the IBM sheet accompanying the booklet. Answer true if you agree with the statement and false if you disagree. When you finish with booklet I, go to booklet II, "Self-Appraisal Questionnaire"--Part II. This booklet contains 20 questions. Make sure you answer all these questions in the enclosed IBM sheet. You have five choices: "very often, fairly often, sometimes, not very often, and practically never" (E put example on the blackboard). You darken number one of your IBM sheet if you feel this statement applies to you "very often", you darken 5 if you feel this statement "practically never" applies to you. Your booklet has additional samples. Feel free to ask questions if you have any."

After finishing the first two booklets the subjects were given the following additional instructions:

"This third test will help us understand better the way you think about yourself and the way you appraise others. Look at the booklet, read the instructions and do the first example provided. (pause) Do you have any questions? Remain seated after you finish and wait for the proctors to collect your folders, make sure the three booklets are completed and inside of the folders."

After the subjects completed Test III and the folders had been collected, they were told by the experimenter,

"There is a second part to this study. You can participate in this second session if you are interested in getting psychological feedback on the tests you just took, and if you want to earn additional experimental credits. If you are interested in your psychological evaluation leave your code number, telephone number and best time you may be reached. A receptionist will call you within the next few days to make an appointment for you with the psychologist who will make the evaluations". (With few exceptions all subjects wanted their psychological evaluation. Those who preferred not to participate in Session II received partial class credit.)

Session II of this investigation took place in the mental health unit of the University Hospital. A front office and a back room were modernly furnished by the Psychology Department to give the impression of a psychologist's office where testing and interviews were usually conducted. The "expert" was a doctoral student in psychology with 11 years of pastoral experience who was accustomed to counselling people, particularly young people. Twenty-four males and twenty-four females were randomly assigned to receive a "masculine evaluation" slipped into their folders unseen, by the psychologist. Another twenty-four males and females were randomly selected to receive a "feminine evaluation" in the same discrete manner. The control group (24 males and 24 females) received no evaluation. The hospital staff was instructed by the hospital administrator to offer any needed assistance to Dr. "F" for the week long consultation. Appointments were made over the telephone by two female undergraduate students doing independent work in psychology under the direction of the experimenter. When a subject entered

the psychologist's room for his interview, he was asked to be seated and to give his code number. The psychologist looked for his folder in his files, held it in his hand, and addressed the subject as follows:

"I have taken three test scores, evaluated them, written my interpretation of them in the form of a description analysis of your personality. The evaluation as you shall see is divided into four parts. There is a paragraph description of you relative to each of the three scales, and a concluding statement in which I have attempted to summarize your personality on the basis of the factors I found in common in all three scales combined. Now I want you to read your evaluation carefully" (gives folder with evaluation to subject).

After the subject finished reading his (her) evaluation the psychologist added:

"Now, there are two other things I would like to find out about you that were not covered in the battery of tests you took. I would like to see how they might fit in with what I have already come up with concerning your personality. I would like to know what your primary interests are, that is what you like to do most with your time. And, I would like to know what your aspirations are, in what direction you are heading, what your professional bent is. I don't want you to give me these answers verbally. Instead I want you to fill out this brief questionnaire." (The Psychologist gave the subject the Cattell's Interest Inventory and Raymond's Job Preference Questionnaires (Appendix B) which constituted the CPI and Janis and Field post-measures of self-esteem.)

The subject was escorted to the back room where a proctor supervised him and showed him how to fill out his IBM form, and made sure he filled out his sex and code number. Upon finishing, the subject was instructed to go back to the psychologist's office who thoroughly debriefed him. Complete debriefing is shown in Appendix E.

The procedure used with the control group was similar to the one described above for the experimental subjects, except for the fact that the control group did not receive a psychological evaluation. After pulling the subjects folder, the psychologist indicated "Your evaluation is not yet completed; there are two other things I would like to find out about you that were not covered in the battery of tests you took. I would like to see....." (In the same manner the remaining instructions, the post testing and debriefing were the same as with the experimental group.)

F. Scoring

CPI scores for Sa and SP scales were determined by the total number of correct "true" and "false" answers with one point assigned to each correct answer. Highest possible score for the SA scale was 17 and 28 for the SP scale. The same procedure was applied to each pre and post-evaluation measures. The Femininity scores were determined in the same manner with a highest possible score of 19 for each pre and post-measures. Janis and Field scores were weighted thusly: one point given to a "very often" answer, two points to "fairly often", three points to "sometimes", four points to "not very often", and five points to a "practically never" response. Highest possible score for each pre and post-evaluation measure was 45.

G. Design

The main experimental design was a two factor design with three levels in one factor and two levels in the other. Factor I represented the "masculine", "feminine" evaluation and the no-evaluation, control group. Factor II represented male and female subjects. The CPI and Janis and Field pre-post evaluation differences constituted the scores for the two dependent measures of self-esteem. Four separate 2x3 ANOVA were run, one for the Janis and Field scores, one for the CPI combined (SA and SP) scores, and two separate ANOVAS for the SA and SP scales of the CPI instrument.

The hypothesis of no sex differences in self-esteem was tested by comparing male and female pre-evaluation scores by means of t test scores.

Verification for the construct validity of the CPI was sought in the following ways. One, by obtaining Pearson Product Moment Correlations between the SA, SP scales and the Janis and Field scale (the latter was used as a criterion). Two, by doing a content analysis of the items. Three, by analyzing the effects of the main experimental manipulation on the post measures of self-esteem (if both instruments were measuring the same variable, similar experimental effect should be found for all post-evaluative measures of self-esteem).

V. RESULTS

This investigation had as its main objectives: (1) to study differential effects of masculine and feminine evaluations on measurements of self-esteem; (2) to establish basic sex differences in self-esteem; and (3) to check the construct validity of the CPI.

To facilitate discussion, this chapter will first present the results of masculine and feminine evaluations on self-esteem. Second, it will present a correlational matrix between pre-manipulation measures of self-esteem. Third, it will compare pre-manipulation male and female self-esteem scores.

For the sake of clarity of presentation, all analyses of variance will be shown in Appendix F. Significant main effects and interactions will be mentioned in this chapter together with other results that, though not significant, are relevant to this investigation.

1. Changes in Self-Esteem as a Function of Masculine and Feminine Evaluations

The following hypotheses were advanced:

- 1) Females receiving a "masculine evaluation" will experience a significant increase in their self-esteem scores.

- 2) Males receiving a "feminine evaluation" will experience a significant decrease in their self-esteem scores.
- 3) Females receiving a "feminine evaluation" will experience no change or decrease in their self-esteem scores.
- 4) Males receiving a "masculine evaluation" will experience no change or an increase in their self-esteem scores.

The above hypotheses received partial confirmation when using the Janis and Field and SA scales. The CPI (combined scores) and the SP scale showed an unexpected downward trend; with the exception of females in the control group, all self-esteem scores declined following the experimental manipulation. Table 7 (on the following page) shows these trends.

Inspection of Table 7 indicates that the Janis and Field and SA scores support hypotheses one and four. These hypotheses predict an increase of self-esteem for males and females following a "masculine evaluation".

Hypothesis number two (decrease in self-esteem for males following a "feminine evaluation") receives no support from the Janis and Field and SA scores. The CPI (combined scores) and SP scores seem to support this hypothesis. However, these results are questionable in view of the downward trend of scores under all experimental conditions (control group being the exception).

Hypothesis number three (no change or decrease in self-esteem for females following a "feminine evaluation") is

TABLE 7

Mean Pre-Post Self-Esteem Scores for CPI (Combined Scores)
 Social Presence (SP) Self-Acceptance (SA)
 And Janis & Field Instruments

Experimental Condition		Pre	Post
		CPI	
Male	Masculine Eval.	32.54	31.70
Subjects	Feminine Eval.	30.50	30.29
	Control	32.87	30.45
Female	Masculine Eval.	31.04	30.12
Subjects	Feminine Eval.	29.54	28.75
	Control	30.20	29.45
		SP	
Male	Masculine Eval.	20.80	18.70
Subjects	Feminine Eval.	20.40	18.40
	Control	21.20	17.80
Female	Masculine Eval.	20.30	18.00
Subjects	Feminine Eval.	19.00	17.20
	Control	19.50	17.90
		SA	
Male	Masculine Eval.	11.70	13.04
Subjects	Feminine Eval.	10.08	11.92
	Control	11.67	12.63
Female	Masculine Eval.	10.75	12.13
Subjects	Feminine Eval.	10.13	11.54
	Control	10.33	11.71
		JANIS & FIELD	
Male	Masculine Eval.	33.75	38.54
Subjects	Feminine Eval.	32.79	36.41
	Control	33.33	35.79
Female	Masculine Eval.	32.41	34.79
Subjects	Feminine Eval.	32.54	32.75
	Control	31.12	31.04

supported by the Janis and Field scores. The SA scale scores approximate, but do not quite confirm, this hypothesis--their results show a pre- and post-test increment, though a minimal one. These same observations apply to results obtained in the female control groups. Male control groups show an increase in self-esteem in both Janis and Field and SA scores.

A further analysis of the data by means of analysis of variance is presented in Tables 13 through 18, Appendix F. Below are the F values of the Sex X Evaluation X Pre-Test Post-test interactions.

TABLE 8

F Values for Sex X Evaluation X Pre-Test Post-Test
Interaction for the Dependent Measures

Dependent Measure	F
CPI (combined)	.74
SP Scale	.98
SA Scale	.30
Janis & Field	.26

(F required for significance is 4.79 at the $p < .01$ level and 3.07 at the $p < .05$ level with 2/138 D.F.)

The above interactions are essential to this investigation, which predicts changes in self-esteem from pre- to post-tests scores due to differential psychological evaluations administered to both sexes. The lack of significance of these interactions weakens our predictions.

The overall analyses of the dependent measures (Tables 13 through 18, Appendix F) revealed two main significant effects due to sex and pre-post sources. F. values are shown in Table 9 presented below.

TABLE 9
F Values for Sex, and Pre-Post,
For the Dependent Measures

Dependent Measure	Sex	(η^2)	Pre-Post	(η^2)
CPI (combined)	4.65*	(.02)	6.20**	(.01)
SP Scale	3.84*	(.02)	65.49****	(.10)
SA Scale	5.06***	(.03)	40.21****	(.08)
Janis & Field	6.84***	(.04)	24.87****	(.03)

(Eta value in parentheses)

*p < .05
**p < .025
***p < .01
****p < .001

No further analysis of the CPI (combined scores) and the SP scores was done; as previously indicated, the trend of these data was opposite to the predicted direction.

The overall analysis of the SA scores (Table 17, Appendix F) showed a significant main effect due to evaluation ($p < .05$). The F value obtained (3.11) was modest and accounted for only 3% of the total variance, nevertheless, increased our confidence regarding the effect that the experimental manipulation might have had on subjects' changes in self-esteem.

The Janis and Field scores were generally in the predicted direction and merited further analysis of the data. The first step taken was to break down the main sex effect and investigate which of the two sexes had actually changed in self-esteem. To answer this question, separate analyses of pre-post test scores for male and female subjects were conducted. A significant pre-post test effect was found for male subjects ($p < .001$) (Table 14, Appendix F) but not for females. However, inspection of Table 7 (page 56) suggested the possibility that changes in self-esteem for female subjects might have been masked in the overall analysis. This possibility was investigated by means of orthogonal comparisons of control and feminine evaluation scores with masculine evaluation scores. These comparisons resulted in significant differences between the experimental conditions ($t = 1.96$, $p < .05$). The results added support to hypotheses one and three, which predicted significant increase in self-esteem for females receiving a "masculine evaluation" and no increase in self-esteem for females receiving a "feminine evaluation". Another important question to answer was whether the pre-post test variance obtained was mainly due to the pre-test scores or to the post-test scores. This question was answered by means of a simple main-effect analysis of sex on pre-post scores (Table 15, Appendix F). This analysis showed significant sex differences in self-esteem due to the post-manipulation scores ($p < .01$, $\eta^2 = .09$).

No significant effects were attributed to the pre-manipulation scores. These results suggest that the obtained changes in self-esteem are due not to initial sampling error but to the experimental manipulation or to other conditions present in the experiment.

2. Correlation Between Pre-Manipulation Measures of Self-Esteem

The following hypothesis was advanced: "There will be a significant positive correlation between measures of self-esteem."

This hypothesis was confirmed ($p < .01$). Table 10 shown below presents a correlational matrix of the self-esteem measuring instruments used.

TABLE 10
Correlation Matrix of the Self-Esteem
Measuring Instruments Used

	Janis	CPI	SA	SP
Janis	1.00	.346* (.314)*	.508* (.397)*	.357* (.481)*
CPI		1.00		
SA			1.00	.417* (.316)*
SP				1.00

(Correlations for females are in parentheses)

N = 72

* $p < .01$

In the light of the differences in trend obtained when considering the SA and SP scales (Table 7, page 56), this experimenter suspected that they were, perhaps, measuring a different variable. True correlation coefficients (corrected for unreliability) were, therefore, computed. These published reliability coefficients were used for computation: for the Janis and Field, .83 (Hovland, p. 58), same coefficient used for both sexes; for the SA, .67 for males and .71 for females; and for the SP, .60 for males and .63 for females (Gould, 1969, p. 19). Table 11 shows the correlation coefficients obtained and Fischer's *t* values (Guilford, 1956, p. 219) employed to test their significance.

TABLE 11

True Correlation Coefficients and Fischer's *t* Values for Janis and Field, SA, SP Scales for Males and Females

	JF-SA	Fischer's <i>t</i>	JF-SP	Fischer's <i>t</i>	SP-SA	Fischer's <i>t</i>
Males	1.04**	58.72*	.68	7.76*	.85	13.50*
Females	.74	9.20*	.69	7.98*	.63	6.79*

**p* < .001

**1.04 value attributed to inflated reliability scores.

The greater significance of the correlations obtained when using true correlation coefficients further confirms the hypothesis of no significant differences between measures of

self-esteem. However, the question remains as to why, if these instruments are all measuring the same variable, they are not all equally affected by the same experimental manipulations. Possible explanations for high correlations between variables are that one may be influencing the other or that both are influenced by a common factor. Perhaps, the SA and Janis and Field instruments share an additional factor not present in the CPI and SP scales; this could account for the even higher correlations obtained between the SA and Janis and Field than with the other instruments. Other alternative explanations are reserved for the discussion section.

3. Basic Sex Differences in Self-Esteem

The following hypothesis was advanced: "No sex differences in self-esteem will be found in either of both measures." (CPI and Janis and Field).

This hypothesis was only partially confirmed. Table 12 presented on the following page shows mean scores, standard deviations, and t values derived in comparing male and female performance on the self-esteem instruments used. T-test performed on the various means yielded significant results ($p < .01$) only when comparing male and female CPI and SP scores. The Janis and Field and SA scores approached but did not reach significance (t of $= 1.96$ needed at $p < .05$). Mean scores for males were higher than for females on every test; this finding may indicate possible sex differences in self-esteem in favor of males.

TABLE 12

Pre-Manipulation Self-Esteem Mean Scores, Standard
Deviations, and t Values for Males and Females
on the CPI, SA, SP, and Janis and Field

Self-Esteem Instrument	Males		Females		t-Values
	X	SD	X	SD	
CPI	31.97	4.16	30.26	3.74	3.11*
SA	11.15	2.21	10.68	1.90	1.62
SP	20.81	2.57	19.58	2.74	3.32*
Janis & Field	33.29	5.31	32.02	6.26	1.57

*p < .01

VI. DISCUSSION

The theoretical impetus for this investigation was provided by Cooley's (1902) and Mead's (1934) "symbolic interaction" position. It asserts that an individual's perceptions of the attitudes that significant others hold towards him shape his self-appraisal.

Of special concern to this experimenter, however, were reported sex differences in self-esteem in the many studies investigated. The majority reported higher self-esteem in men than women. This investigator tends to attribute whatever sex distinctions that may persist to the differential treatment, both role- and description-wise, given to members of both sexes by our society. A by-product of this is the fact that traditionally girls have been assigned, or have assumed, personality characteristics not conducive to behaviors that might be rewarded in the competitive, academic, and business worlds.

It was, therefore, conjectured by this author that if men's higher self-esteem was due partly to differential treatment by relevant others, then assigning stereotypic masculine characteristics to women by a significant other (an "expert") could also result in an increase in self-esteem. Conversely,

feminine characteristics assigned to men should result in lowering self-esteem. However, no significant change or a decrease in self-esteem would be anticipated when females received a "feminine evaluation"; and no change or a slight increase in self-esteem would be expected for men receiving a "masculine evaluation."

Another set of hypotheses connected with pre-manipulation measures was advanced. One of these hypotheses was concerned with the construct validity of the instruments used to measure self-esteem. According to Hamilton (1970), the Janis and Field and the CPI instruments not only correlated highly with each other but seemed to be tapping the same variables (1971). Hamilton's study, and the common use of these instruments by self-esteem investigators, justified their utility in this particular investigation. Therefore, the hypothesis that the Janis and Field and the CPI would be positively correlated was advanced.

It was essential for this study to establish a baseline of self-esteem for males and females prior to the experimental manipulation. Two previous studies (Lanza, 1970; Whitaker, 1972) reporting no sex difference in self-esteem prompted this investigator to speculate that perhaps social changes in the status of women had accounted for a reappraisal of themselves and consequently, higher self-esteem. Predicated on this reasoning, no difference in self-esteem for either measure (the Janis and Field; the CPI) was hypothesized.

Concerning a baseline difference in self-esteem, the results were not conclusive. Significant sex differences in self-esteem were obtained when using CPI ($p < .01$) but not with the Janis and Field. Separate t tests done on the mean scores of the two scales comprising the CPI--the SA and the SP--yielded opposing results. The SP showed significant sex differences in self-esteem ($p < .01$) but the SA did not. In the light of conflicting results, the item content of the two instruments was suspected to be not measuring the same thing, despite the high correlations reported by Gough (1969) and Hamilton (1971).

The hypothesis that there would be a significant positive correlation between the Janis and Field and the CPI was confirmed ($r = .35$ for males and $.31$ for females; $p < .01$). A word of caution is in order when interpreting these results. It must first be observed that, though significant, these correlations are really not very high. Second, the contradictory post-manipulation results obtained for each instrument suggest the possibility that they may not be measuring the same variables. The low but significant correlation obtained might just as easily be attributed to some common factor (other than self-esteem) affecting both instruments.

Our conclusions regarding the effect of assigned personality characteristics on self-esteem can at best be only tentative. Concerning the Janis and Field measure, no evaluation effects were found in an overall analysis of variance

(Appendix F, Table 13). However, closer inspection of the data suggested the possibility that, at least for the females, the evaluation effect had been masked. Orthogonal comparisons showed that of the total variance between psychological evaluations (we are talking about females now), the portion due to the difference between the "masculine" evaluation and the "feminine" evaluation plus the control treatment was significant at the .05 level. This is to say that the results obtained by giving females a "masculine" evaluation clearly appear to be different from the results obtained by the other two treatments. The hypotheses of higher self-esteem with a "masculine" evaluation and no significant differences in self-esteem under the "feminine" evaluation treatment and control conditions were supported by this particular statistical method. However, it must be clear that these evaluation effects, though certainly there, must be relatively weak if they do not appear in the overall analysis of variance (Table 13).

The results for males receiving a "masculine" evaluation were in the predicted direction--i.e., males increased their self-esteem after the experimental manipulation. The results for males receiving a feminine evaluation were not in the predicted direction. These results may be explained in two ways--either by an unpredicted male acceptance of "feminine" characteristics in themselves, or by an elevated sense of worth due to the experimental setting the prestige

connected with the respectful attention paid an undergraduate by a professional psychologist. The first explanation received empirical support from the psychologist observing the non-verbal behavior of the subjects as they received "their" evaluation ("their" being in this case "feminine"); many of them expressed agreement and pleasure in the face of stereotypically feminine characteristics. They felt the psychologist had been competent in detecting their inner feelings, not easily expressed by males in our society--feelings of warmth, weakness, and occasional dependence. The second explanation, that the prestige connected with the respectful attention paid by the psychologist could account for increases in self-esteem, might also hold for the control group (whose self-esteem went up). No evaluation effects were shown in the overall analysis of the CPI and SP scales. Self-esteem scores went down in both cases, disregarding the kind of psychological evaluation received. Sampling error may account for these anomalous results. Splitting of CPI items (SA and SP scales) to be used as pre- and post-manipulation tests was done by taking the odd-numbered items for the pre-manipulation test and the even-numbered items for the post manipulation test. It was therefore assumed that each set of items had the same mean difficulty level or the same empirical response frequency when this may not have been the case.

A separate analysis of the SA scale yielded significant evaluation effects ($p < .05$). However, only two of our

hypotheses were confirmed. Males and females receiving a "masculine" evaluation increased their self-esteem. Surprisingly, males and females in the other experimental conditions also increased in self-esteem. The same explanation given in the Janis and Field for the increase in self-esteem of males receiving "feminine" evaluation and males in the control group could be applied to the SA scale. This same explanation may not apply to responses to the SP scale because of differences in item content; these items may not be as susceptible to psychological variables related to a sense of worth as the items of the Janis and Field and SA scales.

In spite of the above-offered explanations of item-sampling error and item-content differences, it is still puzzling to this author that both scales of the CPI could produce such contrary results in the same subject population. If both scales were measuring the same variable, we would expect similar results after the experimental manipulation. Although Gough (1969, p. 40) reports an inter-correlation of .48 between these two scales, the possibility still remains that this functional relation may be due to another common factor that is not self-esteem. Inspection of Table 19 shows a closer functional relation between the SA and Janis and Field than between the SA and SP. It is then conceivable, as previously suggested, that the similarity of results obtained when using the SA and Janis and Field is attributed to closer similarity in the items measuring self-esteem.

The downward trend of the SP and the CPI (combined SA and SP scales) may be due to the greater number of items contributed by the SP to the total CPI--34 total items by the SA vs. 57 total items by the SP scale ($SD_{sa} = 2.21$ vs. $SD_{sp} = 2.57$ for males and $SD_{sa} = 1.90$ vs. $SD_{sp} = 2.74$ for females). The SA items emphasize sense of personal worth, self-acceptance, self-confidence, capacity for independent thinking, self-assurance, self-concern, and persuasibility. The Janis and Field emphasizes personal worth and sense of inadequacy (Appendices A and B).

If self-esteem is an evaluative judgment of the self, the Janis and Field instrument constitutes a closer measure of the self-esteem construct. The SA scale would approximately, though not exclusively, measure the same variable. The SP would be the farthest away from this criterion. The results obtained in the experiment suggest the possibility that the appraisal of others, in terms of ascribed masculine and feminine characteristics, would have an effect on the aspect of personality measured by the Janis and Field instrument. This would be particularly true for female subjects.

The contradictory results obtained in this investigation reveal some of the weaknesses of research dealing with psychological constructs. Unless an a priori definition is available, the psychological construct requires an operational definition dictated by the measuring instrument. In the case of self-esteem, different instruments seem to be

measuring different variables and operational definitions may be contradictory.

A clear conceptualization of self-esteem and the development of valid measuring instruments seem essential before research on self-esteem may be accepted with any degree of confidence.

REFERENCES

- Bardwick, J. Psychology of Women: A Study of Bio-Cultural Conflicts. New York: Harper and Row, 1971.
- Berger, C. R. Sex differences related to self-esteem factor structure. Journal of Consulting and Clinical Psychology, 1968, 32, 442-446.
- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., Vogel, S. R. Sex-role stereotypes and clinical judgments of mental health. Journal of Consulting and Clinical Psychology, 1970, 34, 1-7.
- Cattell, R. B. Personality. New York: McGraw Hill, 1950.
- Cetlin, I. G. Persistence, defensive behavior, and self-evaluation as a function of early and late anticipation of failure. Ph.D. dissertation, University of Pennsylvania, 1966.
- Clarkson, F. E., Vogel, S. R., Broverman, I. K., Broverman, D. M. and Rosenkrantz, P. S. Family size and sex-role stereotypes. Sciences, 170, 167, 390-392.
- Cooley, G. H. Human Nature and the Social Order. New York: Charles Scribner and Sons, 1902.
- Coopersmith, S. The Antecedents of Self-Esteem. San Francisco: Freeman Press, 1967.
- Cronbach, Lee J. Essentials of Psychological Testing. New York: Harper and Brothers, 1970.
- Diggory, J. C. Self-Evaluation: Concepts and Studies. New York: Wiley and Sons, 1966.
- Dittes, J. E. Effects of changes in self-esteem upon impulsiveness and deliberation in making judgments. Journal of Abnormal and Social Psychology, 1959, 59, 77-82.
- Edwards, A. L. Edwards Personal Preference Schedule. New York: The Psychological Corporation, 1954.

- Freud, S. Some psychological consequences of the anatomical distinction between the sexes. International Journal of Psychoanalysis, 8, 133-142.
- Gough, G. H. California Personality Inventory. Palo Alto, California: Consulting Psychologists Press, Inc., 1969.
- Guilford, J. P. Fundamental Statistics in Psychology and Education. New York: McGraw Hill, 1956.
- Haas, H. I. and Maehr, M. L. Two experiments on the concept of self and the reaction of others. Journal of Personality and Social Psychology, 1971, 1, 100-105.
- Hamilton, D. L. A comparative study of five methods of assessing self-esteem, dominance, and dogmatism. Educational and Psychological Measurement, 1971, 31, 441-452.
- Helper, M. M. Learning theory and the self-concept. Journal of Abnormal and Social Psychology, 1955, 51, 184-194.
- Hovland, C. I. and Janis, I. L. Yale Studies in Attitude and Communication, Vol. 2. New Haven: Yale University Press, 1959.
- Jacobson, L. I., Berger, S. E., Millham, J. Self-Esteem, Sex Differences and the Tendency to Cheat, 1969. Proceedings of the 77th Annual Convention of the American Psychological Association.
- Janis, I. L. Personality correlates of susceptibility to persuasion. Journal of Personality, 1954, 22, 504-518.
- Jarrett, R. F. and Sheriffs, A. C. Sex differences in attitudes about sex differences. The Journal of Psychology, 1953, 35, 161-168.
- Jourard, S. M. and Remy, R. M. Perceived parental attitudes, the self and security. Journal of Consulting Psychology, 1955, 19, 364-366.
- Lanza, E. R. An investigation of various antecedents of self-esteem as related to race and sex. Bell State University, Dissertation Abstracts, 1970, 31, 2-A, 1077.
- Maccoby, E. The Development of Sex Differences. Stanford, California: Stanford University Press, 1966.

- Maehr, M. L., Mensing, J. and Nafzyer, S. Concept of self and the reactions of others. Sociometry, 1962, 25, 353-357.
- Manis, M. Social interaction and the self-concept. Journal of Abnormal Social Psychology, 1955, 51, 362-370.
- McKee, J. P. and Sheriffs, A. C. The differential evaluation of males and females. Journal of Personality, 1956, 25, 356-371.
- Mead, G. H. Mind, Self, and Society. Chicago: University of Chicago Press, 1934.
- Mikessell, R. H., Calhoun, L. G. and Lottman, T. J. Instructional set and the Coopersmith self-esteem inventory. Psychological Reports, 1970, 26, 317-318.
- Miyamoto, S. F. and Dornbusch, S. A. A test of interactionist hypotheses of self-conception. American Journal of Sociology, 1956, 61, 399-403.
- Newcomb, T. M. Social Psychology. New York: Dryden, 1950.
- Osgood, C. E. and Suci, G. J. Factor Analysis of meaning. Journal of Experimental Psychology, 1955, 50, 325-338.
- Phillips, J., Arnoff, J., Messé, L. Sex and psychological need in triadic bargaining. Psychonomic Science, 1971, 22, 329-331.
- Rogers, C. R. Client-Centered Therapy. New York: Houghton Mifflin, 1951.
- Rogers, C. R. and Dzmond, R. F. (Eds.) Psychotherapy and Personality Change: Coordinated Studies in the Client-Centered Approach. Chicago: University of Chicago Press, 1954.
- Rosenberg, N. Parental interest and children's self-conception. Sociometry, 1963, 26, 35-49.
- Rosenkrantz, P., Vogel, S., Bee, H., and Broverman, D. M. Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.
- Rothman, D. Z. The Effects of Success and Failure Experiences in Normal, Neurotic, and Schizophrenic Populations. Ph.D. dissertation, University of Pennsylvania, 1963.
- Sarbin, T. R. Personality Word Card. Berkeley: University of California Press, undated.

- Sears, R. R. Relation of early socialization experiences to self-concepts and gender roles in middle childhood. Child Development, 1970, 41, 267-289.
- Sharma, S. L. Some personality correlates of changes in self-esteem under conditions of stress and support. Journal of Educational Psychology, 1956, 14, 154-165.
- Shrauger, J., Sidney, J., and Rosenberg, S. E. Self-esteem and the effects of success and failure feedback on performance. Journal of Personality, 1970, 404-417.
- Sheriffs, A. C. and McKee, J. P. Qualitative aspects of beliefs about men and women. Journal of Personality, 1957, 25, 451-464.
- Smith, S. Age and sex differences in children's opinion concerning sex differences. Journal of Genetic Psychology, 1949, 54, 17-25.
- Snygg, D. and Combs, A. W. Individual Behavior. New York: Harper, 1949.
- Veldman, D. J. Correlates of visual acuity in college freshman. Perceptual and Motor Skills, 1970, 30, 551-558.
- Videbeck, R. Self-conception and the reactions of others. Sociometry, 1960, 22, 351-359.
- Winer, B. J. Statistical Principles of Experimental Design. New York: McGraw Hill, 1962.
- Whitaker, S. Effects of Sex, Task, and Experimenter on Sex Differences in Self-Esteem (unpublished document), 1972.
- Wylie, R. C. The Self-Concept. Lincoln: The University of Nebraska Press, 1961.

APPENDICES

APPENDIX A

Pre-evaluation Measures of Self-Esteem:

"The Self-Appraisal Questionnaire"--Part I

"The Self-Appraisal Questionnaire"--Part II

SELF-APPRAISAL QUESTIONNAIRE
PART I

Below are a set of questions designed to obtain information about your interests and personality.

In answering the questions, use the enclosed IBM form. If you agree with a statement, or feel that it is true about you, mark T (true) opposite the question number. If you disagree, mark F (false) opposite the question number.

- | | |
|----|---|
| SP | 1. I would like the job of a foreign correspondent for a newspaper. |
| SA | 2. I would rather go without something than ask for a favor. |
| SP | 3. The only interesting part of the newspaper is the funnies. |
| | 4. Any form of birth control other than the rhythm method is immoral. |
| SP | 5. I like to be the center of attention. |
| SA | 6. I often do whatever makes me feel cheerful here and now, even at the cost of some distant goal. |
| | 7. Autos should be banned in city centers. |
| SP | 8. People often expect too much of me. |
| SA | 9. When I work on a committee I like to take charge of things. |
| SA | 10. The minority movements today have unrealistic goals. |
| | 11. Men feel that women are naturally inferior. |
| | 12. Smoking marijuana leads to use of harder drugs. |
| | 13. I approve of Congress' decision refusing to appropriate funds for the improvement of minority groups. |
| | 14. Followers of the Women's Liberation Movement are sexually frustrated females. |
| | 15. I feel that homosexual marriages should be legalized nationally. |

- | | | |
|----|-----|---|
| SA | 16. | The government should make available to everyone birth control information. |
| | 17. | I resent the Roman Catholic lobbyists forcing their views regarding birth control on society. |
| SP | 18. | Clever, sarcastic people make me feel very uncomfortable. |
| | 19. | A person who becomes addicted to drugs should be socially rejected and not helped. |
| SP | 20. | When I get bored I like to stir up some excitement. |
| SA | 21. | Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do. |
| SP | 22. | A person needs to "show off: a little now and then. |
| SP | 23. | It is very hard for me to tell anyone about myself. |
| SP | 24. | I read at least ten books a year. |
| | 25. | I would marry a person of another race. |
| SP | 26. | I seem to be about as capable and smart as most others around me. |
| SA | 27. | A person does not need to worry about other people if only he looks at himself. |
| Fe | 28. | In school I was sometimes sent to the principal for cutting up. |
| SA | 29. | I think I would like to belong to a motorcycle club. |
| SP | 30. | I believe women should have as much sexual freedom as men. |
| | 31. | It is a couple's social obligation to limit the size of their families. |
| Fe | 32. | I very much like hunting. |
| | 33. | The news media is filled with irrelevant news events. |
| | 34. | Men's magazines such as PLAYBOY and PENTHOUSE exploit women sexually and should be censored. |
| Fe | 35. | I like to be with a crowd who play jokes on one another. |
| | 36. | Marijuana should be legalized. |

- | | |
|----|---|
| Fe | 37. I like mechanics magazines. |
| | 38. Birth control destroys the spontaneous quality of love-making. |
| Fe | 39. I become quite irritated when I see someone spit on the sidewalk. |
| | 40. The U. S. government should initiate a heroin rehabilitation program similar to that of Great Britain. |
| SP | 41. Some people exaggerate their troubles in order to get sympathy. |
| | 42. I support bussing. |
| SP | 43. I often feel as if the world was just passing me by. |
| | 44. Raising children should be equally shared by both husband and wife. |
| | 45. I have no prejudices of any type. |
| | 46. I approve of homosexual behavior. |
| | 47. If I were drafted I would fight for my country. |
| Fe | 48. I think I could do better than most of the present politicians if I were in office. |
| | 49. Zero population growth is a good idea. |
| SP | 50. Our thinking would be a lot better off if we would just forget about words like "approximately", "probably", and "perhaps". |
| | 51. Alcohol is more dangerous than marijuana. |
| | 52. Women have a right to be considered useful, contributory members of society and not just as sex objects. |
| Fe | 53. I think I would like the work of a dress designer. |
| Fe | 54. I think I would like the work of a clerk in a large department store. |
| Fe | 55. Sometimes I have the same dream over and over. |
| Fe | 56. I get excited very easily. |
| Fe | 57. I think I would like to drive a racing car. |

- SA/SP 58. Before I do something I try to consider how my friends will react to it.
- SA 59. I would like to be an actor on the stage or in the movies.
- SA 60. I have frequently found myself, when alone, pondering such abstract problems as freewill, evil, etc.
61. The reason some men are against abortion is because they don't want women to be able to destroy a symbol of their masculinity.
- SP 62. Women should not be allowed to drink in cocktail bars.
- SP 63. I am embarrassed by dirty jokes.
- SP 64. I usually feel ill at ease and nervous at a formal dance or party.
65. Women's lib tactics scare me.
- SP 66. I find it hard to keep my mind on a task or job.
- SP 67. In most ways the poor man is better off than the rich man.
- SA 68. I would like to wear expensive clothes.
- Fe 69. I want to be an important person in the community.
70. Abortions should be performed on women whose children, through tests, are shown to have some kind of deficiency.
- Fe 71. The thought of being in an automobile accident is very frightening to me.
- SA 72. When a man is with a woman he is usually thinking about things related to her sex.
- SP 73. I have no dread of going into a room by myself where other people have already gathered and are talking.
- SA 74. Police cars should be especially marked so that you can always see them coming.
- SA 75. At times I have worn myself out by undertaking too much.
- Fe 76. I would like to be a soldier.
- SA 77. It is very hard for me to act natural when I am with new people.

- | | | |
|-------|-----|--|
| SP | 78. | I would do anything on a dare. |
| FE/SP | 79. | I get very tense and anxious when I think other people are disapproving of me. |
| SA/SP | 80. | In school I found it very hard to talk before the class. |
| SP | 81. | There have been times when I have been very angry. |
| | 82. | I gossip a little at times. |
| Fe | 83. | I'm pretty sure I know how we can settle the international problems we face today. |
| SP | 84. | I always follow the rule: business before pleasure. |
| Fe | 85. | I am somewhat afraid of the dark. |
| SA | 86. | I never make judgments about people until I am sure of the facts. |
| SA/SP | 87. | I would disapprove of anyone's drinking to the point of intoxication at a party. |
| Fe | 88. | A windstorm terrifies me. |
| Fe | 89. | I must admit that I enjoy playing practical jokes on people. |

SELF-APPRAISAL QUESTIONNAIRE

PART II

Please answer the following questions by filling in on your IBM sheet the number corresponding to the choice you feel is the best answer.

Example: Do you ever feel that you are "sitting on top of the world"?

1.....	2.....	3.....	4.....	5.....
Very	fairly	sometimes	not very	practically
often	often		often	never

If you sometimes feel that you are "sitting on top of the world", you would fill in choice 3 on your answer sheet.

Raise your hand if you have any questions. If the instructions are clear, please proceed to answer the following 20 questions.

JF

1. How often do you feel inferior to people you know?

1.....	2.....	3.....	4.....	5.....
very	fairly	sometimes	not very	practically
often	often		often	never

2. How often do you feel that you want to do the opposite of what other people want you to do?

1.....	2.....	3.....	4.....	5.....
very	fairly	sometimes	not very	practically
often	often		often	never

JF

3. How confident do you feel that some day the people you know will look up to you and respect you?

1.....	2.....	3.....	4.....	5.....
very	fairly	slightly	not very	not at all

4. When you are in the presence of strangers, do you ever wonder whether they might cheat you or try to get something out of you?

1.....	2.....	3.....	4.....	5.....
very	fairly	sometimes	not very	practically
often	often		often	never

JF

5. Do you ever feel so discouraged with yourself that you wonder whether anything is worthwhile?

1.....	2.....	3.....	4.....	5.....
very	fairly	sometimes	not very	practically
often	often		often	never

6. Do you feel annoyed when people try to tell you how to do something?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 7. In general, how confident do you feel about your abilities?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
8. How often do you feel suspicious of other people?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never
- JF 9. How much do you worry about how well you get along with other people?
 1.....2.....3.....4.....5.....
 very fairly a little not very not at all
 much much much
10. Do you ever wonder what hidden reason another person may have for doing something nice for you?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never
- JF 11. Do you ever feel afraid or anxious when you are going into a room by yourself where other people have already gathered and are talking?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never
12. How angry do you feel when someone tries to make you do something you don't want to do?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 13. When you have to talk in front of a class or a group of people your own age, how afraid or worried do you usually feel?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
14. Do you enjoy talking with people?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all

- JF 15. How much do you worry about whether other people will regard you as a success in your job or career?
 1.....2.....3.....4.....5.....
 very fairly a little not very not at all
 much much much
16. Are you ever bothered with nervousness?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 much much much never
- JF 17. How often do you worry about whether other people like to be with you?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never
18. Do you find that you often have to tell people to mind their own business?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never
- JF 19. When you are trying to convince other people who disagree with your ideas, how worried do you usually feel about the impression you are making?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 20. How often do you feel worried or bothered about what other people think of you?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very practically
 often often often never

APPENDIX B

Post-evaluation Measures of Self-Esteem:

The "Cattell's Interest Inventory"

"Raymond's Job Preference Questionnaire"

CATTELL'S INTEREST INVENTORY

Answer the questions below using the enclosed IBM form. If you agree with a statement or feel it is true about you, mark True (T) opposite the question's number. If you disagree, mark False (F) opposite the question's number.

- | | |
|-------|--|
| SA | 1. When in a group of people, I have trouble thinking of the right things to talk about. |
| SA | 2. I looked up to my father as an ideal man. |
| Fe | 3. I must admit I feel sort of strange when I move to a strange place. |
| SA | 4. I doubt whether I would make a good leader. |
| | 5. If something doesn't work, I take it to someone who can fix it. |
| SA | 6. It is hard for me to start a conversation with strangers. |
| SP | 7. Most of the time I feel happy. |
| | 8. I must admit that I enjoy playing practical jokes on people. |
| Fe | 9. I always tried to make the best school grades I could. |
| Fe | 10. I like to go to parties and other affairs where there is lots of loud fun. |
| | 11. Expressing myself intelligently has always come easy for me. |
| SA | 12. I must admit that I often do as little work as I can get by with. |
| | 13. I prefer my actions to speak for me. |
| Fe/SP | 14. I think I am stricter about right and wrong than most people. |
| | 15. I am particularly good at working crossword puzzles. |
| SP | 16. I often act on the spur of the moment without stopping to think. |

- SA/SP 17. It is hard for me to find anything to talk about when I meet a new person.
18. I don't know an ignition wire from a water pump.
19. Perceiving objects in different dimensions is simple for me.
20. I'd rather be an auto mechanic than a language teacher.
- SP 21. People today have forgotten how to feel properly ashamed of themselves.
22. I believe the pen is mightier than the sword.
- SP 23. I wish I were not bothered by thoughts about sex.
24. English is a subject more for girls than for guys.
- SA 25. I seldom or never have dizzy spells.
26. I find it very difficult to picture myself standing behind a machine all day.
- Fe 27. I think I would like the work of a garage mechanic.
- Fe 28. I prefer a shower to a tub bath.
- SA 29. I was a slow learner in school.
- Fe 30. At times I feel like picking a fist-fight with someone.
- SP 31. I much prefer symmetry to asymmetry.
32. Writing is one of my most important outlets for expression.
- SP 33. It makes me uncomfortable to put on a stunt at a party even though others are doing the same sort of thing.
- SP 34. I believe we are made better by the trials and hardships of life.
35. The thought of being in an automobile accident is very frightening to me.
36. I would rather work with my hands than with anything else.
- SP 37. In a group of people, I would not be embarrassed to be called upon to start a discussion or give an opinion on something I know well.

38. People tell me that I have a way with words.
39. I enjoy working mathematical problems.
40. I can talk myself out of just about everything.
- SA 41. I would like to see a bullfight in Spain.
42. I am a better talker than a doer.
43. Give me something to tinker with and I am in my glory.
- SP 44. A large number of people are guilty of bad sexual behavior.
- SA 45. Women should not be allowed to drink in cocktail bars.
46. Reading poetry is my idea of relaxation.
47. I think I would like the work of a clerk in a large department store.
- SP 48. I usually expect to succeed in things I do.
- Fe 49. If I get too much change in a store, I always give it back.
50. I have a lot of trouble saying what I think.
- SP 51. I take a rather serious attitude toward ethical and moral issues.
- SP 52. My parents have generally let me make my own decisions.
- Fe 53. I like to boast about my accomplishments every now and then.
- SP 54. I usually feel that life is worthwhile.
- SP 55. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do.
- SA/SP 56. Once in a while I laugh at a dirty joke.
- Fe 57. I think I would like the work of a librarian.
- SA 58. When in a group, I usually do what the others want rather than make suggestions.
59. I use my imagination creatively.
- SA 60. I set high standards for myself and feel that others should do the same.

- Fe 61. I am very slow in making up my mind.
- SA 62. Most of the arguments and quarrels I get into are over matters of principle.
63. I am more interested in facts than ideas.
- SA/SP 64. I am certainly lacking in self-confidence.
- Fe 65. If I were a reporter, I would very much like to report news about the theatre.
- SP 66. I refuse to play some games because I am not very good at them.
- Fe 67. I think I would like the work of a building contractor.
- SP 68. Most people worry too much about sex.
- SP 69. I enjoy many different kinds of play and recreation.
- SA 70. I sometimes pretend to know more than I really do.
71. I have a great deal of curiosity about people.
72. When it comes to putting things into words, I am at a loss.
73. Words come easy for me, but feelings come hard.
- SA 74. My daily life is full of things that keep me interested.
- SP 75. I hardly ever get excited or thrilled.
76. The women of America have no real complaint about their way of life.
- Fe 77. I would like to be a nurse.
78. I admire people who can say what they want to say the way they want to say it.
79. As a child, I used to watch my dad for hours fix things around the house.
80. I would enjoy becoming a famous lawyer.
- Fe 81. The average person is not able to appreciate music very well.
82. I am certainly lacking in self-confidence and poise when I meet strangers.

- Fe | 83. I like adventure stories better than romantic stories.
- SP | 84. I am apt to show off in some way if I get a chance.
- Fe | 85. Sometimes I feel that I am about to go to pieces.
- SP | 86. I like large noisy parties.
- SP | 87. When I meet a stranger, I often feel that he is better than
I am.
- SP | 88. Criticism or scolding often makes me very uncomfortable.
- SP/Fe | 89. I am inclined to take things hard.

RAYMONDS JOB PREFERENCE QUESTIONNAIRE

Please answer the following questions by filling in on your IBM sheet the number corresponding to the choice you feel is the best answer.

Example: How often do you like to assume supervisory positions?

1.....	2.....	3.....	4.....	5.....
very	fairly	sometimes	not very	practically
often	often		often	never

If you very often enjoy supervising others, you would will in choice 1 on your answer sheet.

Raise your hand if you have any questions; otherwise, proceed.

- | | | | | | | | | | | | | | | | | |
|--------|--|-----------|----------|------------|--------|--------|------|--------|-----------|----------|------------|-------|-------|--|-------|--|
| JF | <p>1. Do you feel it is important to do your best in whatever you undertake?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>slightly</td> <td>not very</td> <td>not at all</td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | slightly | not very | not at all | | | | | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | slightly | not very | not at all | | | | | | | | | | | | |
| | <p>2. Is it important to you to become a recognized authority in some job, profession, or field of specialization?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>slightly</td> <td>not very</td> <td>not at all</td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | slightly | not very | not at all | | | | | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | slightly | not very | not at all | | | | | | | | | | | | |
| JF | <p>3. Do you ever think you are worthless?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>sometimes</td> <td>not very</td> <td>not at all</td> </tr> <tr> <td>often</td> <td>often</td> <td></td> <td>often</td> <td></td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | sometimes | not very | not at all | often | often | | often | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | sometimes | not very | not at all | | | | | | | | | | | | |
| often | often | | often | | | | | | | | | | | | | |
| | <p>4. How often do you like to experience novelty and change in your daily routine?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>sometimes</td> <td>not very</td> <td>not at all</td> </tr> <tr> <td>often</td> <td>often</td> <td></td> <td>often</td> <td></td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | sometimes | not very | not at all | often | often | | often | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | sometimes | not very | not at all | | | | | | | | | | | | |
| often | often | | often | | | | | | | | | | | | | |
| | <p>5. How much do you enjoy working outdoors?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>slightly</td> <td>not very</td> <td>not at all</td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | slightly | not very | not at all | | | | | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | slightly | not very | not at all | | | | | | | | | | | | |
| JF | <p>6. How often do you feel to blame for your mistakes?</p> <table border="0"> <tr> <td>1.....</td> <td>2.....</td> <td>3.....</td> <td>4.....</td> <td>5.....</td> </tr> <tr> <td>very</td> <td>fairly</td> <td>slightly</td> <td>not very</td> <td>not at all</td> </tr> <tr> <td>often</td> <td>often</td> <td></td> <td>often</td> <td></td> </tr> </table> | 1..... | 2..... | 3..... | 4..... | 5..... | very | fairly | slightly | not very | not at all | often | often | | often | |
| 1..... | 2..... | 3..... | 4..... | 5..... | | | | | | | | | | | | |
| very | fairly | slightly | not very | not at all | | | | | | | | | | | | |
| often | often | | often | | | | | | | | | | | | | |

7. How much do you try to avoid situations in which you are expected to do things in a conventional way?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
 often often often
8. How satisfied do you feel in knowing you have done a difficult job well?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 9. How often do you feel you dislike yourself?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
10. How independent of others do you remain in deciding what you want to do?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
11. How often do you criticize people in a position of authority?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
- JF 12. How often do you have a feeling that there is nothing you can do well?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
13. How often do you find yourself telling others how to do their job.
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
14. How much do you try to avoid responsibilities and obligations?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 15. How often do you worry about criticisms that might be made of your work by whoever is responsible for checking up on your work?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often

16. When you are working in a group, how much do you like to assume leadership of the group?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
17. How often do you find yourself talking about your achievements?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
- JF 18. How often do you feel self-conscious?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
19. When you are given an assignment to do, how important is it to you to start in and keep working until it is done?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 20. When you are trying to win in a game or sport and you know that other people are watching you, how rattled or flustered do you usually get?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
21. How much do you dislike being interrupted while at work?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
22. How much do you respect people who can perform well as leaders?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 23. When you are in a group of people, do you have trouble thinking of the right things to say?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
24. How important is it to you that you secure a well-paying job?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
25. How often do you find your mind wandering when you are trying to complete a task?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often

- JF 26. Do you find it hard to talk when you meet new people?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
27. How important is it to you that other people be punctual
 when you have planned to meet with them?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 28. How often are you troubled with shyness?
 1.....2.....3.....4.....5.....
 very fairly sometimes not very not at all
 often often often
29. How disturbing would it be to you if you had to drive for
 an hour to reach your place of employment?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all
- JF 30. When you think about the possibility that some of your
 friends and acquaintances might not have a good opinion of
 you, how concerned or worried do you feel about it?
 1.....2.....3.....4.....5.....
 very fairly slightly not very not at all

APPENDIX C

Measures of Stereotypes

"The Others Appraisal Scales"

1. Not at all aggressive	1.....2.....3.....4.....5.....6.....7	Very aggressive
2. Very rational	1.....2.....3.....4.....5.....6.....7	Very irrational
3. Very practical	1.....2.....3.....4.....5.....6.....7	Very impractical
4. Not at all independent	1.....2.....3.....4.....5.....6.....7	Very independent
5. Not at all consistent	1.....2.....3.....4.....5.....6.....7	Very consistent
6. Very emotional	1.....2.....3.....4.....5.....6.....7	Not at all emotional
7. Very realistic	1.....2.....3.....4.....5.....6.....7	Not at all realistic
8. Not at all idealistic	1.....2.....3.....4.....5.....6.....7	Very idealistic
9. Does not hide emotions at all	1.....2.....3.....4.....5.....6.....7	Almost always hides emotions
10. Very subjective	1.....2.....3.....4.....5.....6.....7	Very objective
11. Mainly interested in details	1.....2.....3.....4.....5.....6.....7	Mainly interested in generalities
12. Always thinks before acting	1.....2.....3.....4.....5.....6.....7	Never thinks before acting
13. Not at all easily influenced	1.....2.....3.....4.....5.....6.....7	Very easily influenced
14. Not at all talkative	1.....2.....3.....4.....5.....6.....7	Very talkative
15. Very grateful	1.....2.....3.....4.....5.....6.....7	Very ungrateful
16. Doesn't mind at all when things are not clear	1.....2.....3.....4.....5.....6.....7	Minds very much when things are not clear
17. Very dominant	1.....2.....3.....4.....5.....6.....7	Very submissive

18.	Dislikes math and science very much	1.....2.....3.....4.....5.....6.....7	Likes math and science very much
19.	Not at all reckless	1.....2.....3.....4.....5.....6.....7	Very reckless
20.	Not at all excitable in a major crisis	1.....2.....3.....4.....5.....6.....7	Very excitable in a major crisis
21.	Not at all excitable in a minor crisis	1.....2.....3.....4.....5.....6.....7	Very excitable in a minor crisis
22.	Not at all strict	1.....2.....3.....4.....5.....6.....7	Very strict
23.	Very weak personality	1.....2.....3.....4.....5.....6.....7	Very strong personality
24.	Very active	1.....2.....3.....4.....5.....6.....7	Very passive
25.	Not at all able to devote completely to others	1.....2.....3.....4.....5.....6.....7	Able to devote self completely to others
26.	Very blunt	1.....2.....3.....4.....5.....6.....7	Very tactful
27.	Very gentle	1.....2.....3.....4.....5.....6.....7	Very rough
28.	Very helpful to others	1.....2.....3.....4.....5.....6.....7	Not at all helpful to others
29.	Not at all competitive	1.....2.....3.....4.....5.....6.....7	Very competitive
30.	Very logical	1.....2.....3.....4.....5.....6.....7	Very illogical
31.	Not at all competent	1.....2.....3.....4.....5.....6.....7	Very competent
32.	Very worldly	1.....2.....3.....4.....5.....6.....7	Very home oriented
33.	Not at all skilled in business	1.....2.....3.....4.....5.....6.....7	Very skilled in business

34. Very direct	1.....2.....3.....4.....5.....6.....7	Very sneaky
35. Knows the way of the world	1.....2.....3.....4.....5.....6.....7	Does not know the way of the world
36. Not at all kind	1.....2.....3.....4.....5.....6.....7	Very kind
37. Not at all willing to accept change	1.....2.....3.....4.....5.....6.....7	Very willing to accept change
38. Feelings not easily hurt	1.....2.....3.....4.....5.....6.....7	Feelings easily hurt
39. Not at all adventurous	1.....2.....3.....4.....5.....6.....7	Very adventurous
40. Very aware of the feelings of others	1.....2.....3.....4.....5.....6.....7	Not at all aware of the feelings of others
41. Not at all religious	1.....2.....3.....4.....5.....6.....7	Very religious
42. Not at all intelligent	1.....2.....3.....4.....5.....6.....7	Very intelligent
43. Not at all interested in own appearance	1.....2.....3.....4.....5.....6.....7	Very interested in own appearance
44. Can make decisions early	1.....2.....3.....4.....5.....6.....7	Has difficulty making decisions
45. Gives up very easily	1.....2.....3.....4.....5.....6.....7	Never gives up easily
46. Very shy	1.....2.....3.....4.....5.....6.....7	Very outgoing
47. Always does things without being told	1.....2.....3.....4.....5.....6.....7	Never does things without being told
48. Doesn't cry easily	1.....2.....3.....4.....5.....6.....7	Cries easily
49. Almost never acts as a leader	1.....2.....3.....4.....5.....6.....7	Almost always acts as a leader

50.	Easily worried	1.....2.....3.....4.....5.....6.....7	Not easily worried
51.	Very neat in habits	1.....2.....3.....4.....5.....6.....7	Very sloppy in habits
52.	Very quiet	1.....2.....3.....4.....5.....6.....7	Very loud
53.	Not at all intellectual	1.....2.....3.....4.....5.....6.....7	Very intellectual
54.	Very careful	1.....2.....3.....4.....5.....6.....7	Very careless
55.	Not at all self-confident	1.....2.....3.....4.....5.....6.....7	Very self-confident
56.	Feels very superior	1.....2.....3.....4.....5.....6.....7	Feels very inferior
57.	Always sees self as running the show	1.....2.....3.....4.....5.....6.....7	Never sees self as running the show
58.	Not at all uncomfortable about being aggressive	1.....2.....3.....4.....5.....6.....7	Very comfortable about being aggressive
59.	Very good sense of humor	1.....2.....3.....4.....5.....6.....7	Poor sense of humor
60.	Not at all understanding of others	1.....2.....3.....4.....5.....6.....7	Very understanding of others
61.	Very warm in relations with others	1.....2.....3.....4.....5.....6.....7	Very cold in relations with others
62.	Doesn't care about being in a group	1.....2.....3.....4.....5.....6.....7	Greatly prefers being in a group
63.	Very little need for security	1.....2.....3.....4.....5.....6.....7	Very strong need for security
64.	Not at all ambitious	1.....2.....3.....4.....5.....6.....7	Very ambitious

65.	Very rarely takes extreme positions	1.....2.....3.....4.....5.....6.....7	Very frequently takes extreme positions
66.	Able to separate feelings from ideas	1.....2.....3.....4.....5.....6.....7	Unable to separate feelings from ideas
67.	Not at all dependent	1.....2.....3.....4.....5.....6.....7	Very dependent
68.	Does not enjoy art and literature at all	1.....2.....3.....4.....5.....6.....7	Enjoys art and literature very much
69.	Seeks out new experiences	1.....2.....3.....4.....5.....6.....7	Avoids new experiences
70.	Not at all restless	1.....2.....3.....4.....5.....6.....7	Very restless
71.	Very uncomfortable when people express emotions	1.....2.....3.....4.....5.....6.....7	Not at all uncomfortable when people express emotions
72.	Easily expresses tender feelings	1.....2.....3.....4.....5.....6.....7	Does not express tender feelings easily
73.	Very conceited about appearance	1.....2.....3.....4.....5.....6.....7	Never conceited about appearance
74.	Retiring	1.....2.....3.....4.....5.....6.....7	Forward
75.	Thinks men are superior to women	1.....2.....3.....4.....5.....6.....7	Does not think men are superior to women
76.	Very sociable	1.....2.....3.....4.....5.....6.....7	Not at all sociable
77.	Very affectionate	1.....2.....3.....4.....5.....6.....7	Not at all affectionate
78.	Very conventional	1.....2.....3.....4.....5.....6.....7	Not at all conventional
79.	Very masculine	1.....2.....3.....4.....5.....6.....7	Not at all masculine

- | | | |
|--------------------|---------------------------------------|----------------------|
| 80. Very feminine | 1.....2.....3.....4.....5.....6.....7 | Not at all feminine |
| 81. Very assertive | 1.....2.....3.....4.....5.....6.....7 | Not at all assertive |
| 82. Very impulsive | 1.....2.....3.....4.....5.....6.....7 | Not at all impulsive |

APPENDIX D

Psychological Evaluations

MASCULINE EVALUATIONS
-to male & female subjects-

MICHIGAN STATE UNIVERSITY East Lansing . Michigan 48823

Department of Psychology . Olds Hall

May 30, 1972

Subject: _____

Tests Administered: Self-Appraisal I and II
Others Appraisal Scale

Self-Appraisal Test I reveals a basically independent, active personality who is able to detach herself from others and devote her energies to her work. It is unlikely that this individual will become excitable in either minor or major crises or that she will show open signs of emotionality, like crying, even under the greatest stress. She will not always take the greatest interest in her appearance.

Self-Appraisal Test II only confirms the results obtained in Self-Appraisal Test I. It further reveals a dominant personality who is self-confident and not easily influenced by others. Understandably, this subject tends to feel superior to others. She will be able to take charge of a situation and not feel uncomfortable about showing aggression if the situation demands it. Her leadership qualities are reinforced by her ability to separate feelings from ideas as well as her objective approach to the solution of a problem. Although the above tendencies may not presently be manifested, the tests' results definitely show independence and feelings of security. The subject's self-confidence prompts this examiner to predict that she will not be easily shaken or worried about everyday life, but instead she will face her problems and make her own decisions.

The Others Appraisal Scale projects the picture of an individual who is not conventional and shows a concern for worldly affairs. She is also a practical person who objects very much when things and events around her are not clear. In her interpersonal relations she is sometimes rather blunt and will not be very understanding of others. However, this apparent lack of kindness may sometimes be attributed to the subject's involvement in her work or in the pursuit of her own personal goals. She will not always display a good sense of humor and will not easily respond to the authority of others.

The overall evaluation is one of self-control, competence, independence, and a general sense of security.

Kenneth L. Fischer
Psychologist

KLP:lj

MICHIGAN STATE UNIVERSITY East Lansing . Michigan 48823

Department of Psychology . Olds Hall

May 30, 1972

Subject: _____

Tests Administered: Self-Appraisal I and II
Others Appraisal Scale

Self-Appraisal Test I reveals a basically independent, active personality who is able to detach himself from others and devote his energies to his work. It is unlikely that this individual will become excitable in either minor or major crises or that he will show open signs of emotionality, like crying, even under the greatest stress. He will not always take the greatest interest in his appearance.

Self-Appraisal Test II only confirms the results obtained in Self-Appraisal Test I. It further reveals a dominant personality who is self-confident and not easily influenced by others. Understandably, this subject tends to feel superior to others. He will be able to take charge of a situation and not feel uncomfortable about showing aggression if the situation demands it. His leadership qualities are reinforced by his ability to separate feelings from ideas as well as his objective approach to the solution of a problem. Although the above tendencies may presently not be manifested, the tests' results definitely show independence and feelings of security. The subject's self-confidence prompts this examiner to predict that he will not be easily shaken or worried about everyday life, but instead he will face his problems and make his own decisions.

The Others Appraisal Scale projects the picture of an individual who is not conventional and shows a concern for worldly affairs. He is also a practical person who objects very much when things and events around him are not clear. In his interpersonal relations he is sometimes rather blunt and will not be very understanding of others. However, this apparent lack of kindness may sometimes be attributed to the subject's involvement in his work or in the pursuit of his own personal goals. He will not always display a good sense of humor and will not easily respond to the authority of others.

The overall evaluation is one of self-control, competence, independence, and a general sense of security.

Kenneth L. Fischer
Psychologist

KLP:lj

FEMININE EVALUATIONS
-to male & female subjects-

MICHIGAN STATE UNIVERSITY East Lansing . Michigan 48823

Department of Psychology . Olds Hall

May 22, 1972

Subject: _____

Tests Administered: Self-Appraisal I and II
Others Appraisal Scales

Self-Appraisal Test I reveals an underlying submissive personality who given the right circumstances will be able to devote herself completely to others. She most likely will become excitable in both major and minor crises and will tend to cry easily given sufficient stress. In terms of personal decorum, she has a genuine interest in her own appearance.

Self-Appraisal Test II only confirms the results obtained in Self-Appraisal Test I. It further reveals a rather dependent personality with easily hurt feelings. Her sensitivity makes her sometimes unable to separate feelings from ideas and to become easily influenced by others. Although the above tendencies may presently not be manifested, the tests' results definitely show passivity and a strong need for security. She suffers from deep feelings of inferiority which prompts this examiner to predict that this subject will always tend to worry in everyday life, particularly in light of a latent difficulty in making decisions.

The Others Appraisal Scales project the picture of an individual concerned with the welfare of her home and family, but not at all conventional. She is a practical person who objects very much when things and events around her are not clear. In her interpersonal relations she is kind, tactful, shows great understanding of others and will most likely feel uncomfortable when openly expressing aggression. This subject will not always display a good sense of humor and will frequently respond to the authority of others.

The overall evaluation is one of sensitivity, kindness, dependence, and a strong need for security.

Kenneth L. Fischer
Psychologist

KLF:lj

MICHIGAN STATE UNIVERSITY East Lansing . Michigan 48823

Department of Psychology . Olds Hall

May 23, 1972

Subjects: _____

Tests Administered: Self-Appraisal I and II
Others Appraisal Scales

Self-Appraisal Test I reveals an underlying submissive personality who given the right circumstances will be able to devote himself completely to others. He most likely will become excitable in both major and minor crises and will tend to cry easily given sufficient stress. In terms of personal decorum, he has a genuine interest in his own appearance.

Self-Appraisal Test II only confirms the results obtained in Self-Appraisal Test I. It further reveals a rather dependent personality with easily hurt feelings. His sensitivity makes him sometimes unable to separate feelings from ideas and to become easily influenced by others. Although the above tendencies may presently not be manifested, the tests' results definitely show passivity and a strong need for security. He suffers from deep feelings of inferiority which prompts this examiner to predict that this subject will always tend to worry in everyday life, particularly in light of a latent difficulty in making decisions.

The Others Appraisal Scales project the picture of an individual concerned with the welfare of his home and family, but not at all conventional. He is a practical person who objects very much when things and events around him are not clear. In his interpersonal relations he is kind, tactful, shows great understanding of others and will most likely feel uncomfortable when openly expressing aggression. This subject will not always display a good sense of humor and will frequently respond to the authority of others.

The overall evaluation is one of sensitivity, kindness, dependence, and a strong need for security.

Kenneth L. Fischer
Psychologist

KLF:lj

APPENDIX E

Debriefing Procedure

Subjects' Feedback

Below is an example of the debriefing given by the Psychologist to a male subject having received a masculine evaluation.

I want you to promise me that you will keep what I have to say to you confidential. Do you agree? The research for this study began a couple of months ago with the researcher asking herself the question, "Do women have a lower self-esteem than men?" Most of the literature she read about women and sex differences had said that they do. However, there was little or no empirical evidence to support this. And so, last term she administered a test on self-esteem to 250 male and female freshmen students here on campus, and found there were no sex differences in self-esteem.

However, she decided to go ahead on the assumption that women did have a lower self-esteem than men, and then asked herself the question, why? For two reasons, she hypothesized. One, because the roles that are assigned to them, or that they assume, in this life are less prestigious, and therefore they feel less important in fulfilling them. Or, two, because of the way we talk about women, or write about them, the adjectives we use to describe them have lower esteem value in our society. . . . We refer to them as dependent, passive, emotional, irrational, etc.

Now, the battery of tests that you took had self-esteem items in them. And so, we have a self-esteem score for you. We know how highly you value yourself as a person. We also found out from you where you place yourself on a masculinity-femininity continuum. In the third test we found out from you what you considered to be typically masculine and feminine characteristics in our society.

Now the findings of that third test are what we were particularly interested in. We took your findings and combined them with 143 other people who took the same test. And, where 80% or more of you agreed, we made two lists of characteristics, one masculine, the other feminine. We then ranked them in order of frequency and settled for the top 20 in each column. We then took these characteristics and built them into two evaluations of personality, one masculine, the other feminine. We then divided all of you subjects into six groups. You were randomly selected to be in the group of males designated to receive from me, the "Expert", as your evaluation, the Masculine Evaluation. In other words (showing him the evaluation) this evaluation isn't really yours, but it's rather a compilation of the 20 characteristics that you and the majority of the other subjects agreed were most typical of males in our society, nested in psychological jargon.

Now, here's the reasoning involved. We expected that you who perhaps had a reasonably high score on the pre-test

on self-esteem, and rated yourself highly masculine, would read this evaluation believing that it were your own, and have a positive reaction to the highly esteemed adjectives therein, and that your post-test self-esteem score, which incidentally I got from you when you took that job preference questionnaire (there were self-esteem items in it), would either hold constant or go up slightly.

We have 24 females coming through here who will receive the same evaluation that you did; only the pronouns are changed from he to she. And we expect that when they read this evaluation, believing that it's their own, that even though they might not think that everything that's written there pertains to them (because for many of them, it will be the first time any of these "neat" things have been said about them), that their self-esteem will go up considerably.

Now, we've got 24 males coming through here who will receive as their evaluation just the "flip side" of this one. They'll be getting the Feminine Evaluation. Interestingly enough, I've already run a number of these subjects, and they weren't all that "taken back" by what they read. Which leads me to believe that maybe the differences are beginning to wash away. Maybe, men can now talk about themselves a little bit easier as being sensitive, kind, and open with their feelings. However, we expect their self-esteem to drop slightly.

We've got 24 females who will be reading, as their evaluation, the Feminine Evaluation. I've run a few of them already too. And as we expected, their reaction seems to be one ranging from "blah" to overt hostility. We anticipate their self-esteem to drop.

Two groups of 24 males and 24 females will be coming through here and when I get to the point of asking them to read their evaluations, I make up some excuse (tell them that I need more information first) and get them into the other room to take their post-test on self-esteem. They, therefore, receive no evaluation. We have for them, then, a pre-test score on self-esteem and a post-test score on self-esteem, with no manipulation in-between. We're hoping that the differences in their two scores will be minimal, certainly less than the differences in the scores of the groups that we manipulated.

Now, because there is a deception involved in this experiment; because this is really not your evaluation but a "trumped up" one, I have to tell you all this ethically. In doing so, I disclose to you the manipulation which is essential to the experiment. That is why I need your confidence. Because if subjects come through here, knowing ahead of time that they are going to be deceived, they will mess things up for us on the other end. Do you understand?

Now, as a bonus to you, your personality assessment will be given to you if you want it. The person whose research

this is happens to be a bona fide test expert. She worked for seven years in the school system, giving and assessing tests for her living. I will give you her name, phone number, and office number. You contact her in the next day or two. Give her your code number. Tell her that you've been in to see me, and set up an appointment to see her sometime during the middle or the end of exam week, and she will be happy to give you the real appraisal of your personality. I will give you your five credits now. O.K.?

And thank you very much for coming, and be sure not to mention any of this to anyone.

Each of the 144 participating subjects received a letter from the experimenter together with feedback of their responses to the battery of tests received prior to the experimental manipulation. Below is a format of this letter and the feedback sent to Jean, one of the subjects.

MICHIGAN STATE UNIVERSITY East Lansing . Michigan 48823

Department of Psychology . Olds Hall

July 18, 1972

Dear Jean,

Enclosed you will find the following information:

(a) Your perceptions of men, women, and yourself as revealed by the Other's Appraisal Scale test you took while participating in the experiment I conducted last Spring.

(b) The perceptions of men and women held by the majority of students who participated in the experiment. This information will help you determine how far from or close to the other students you are in perceptions of males and females.

The original tests you took before you saw the "Psychologist" included two booklets with questions designed to measure your self-esteem. These instruments were the California Personality Inventory (CPI) and the Janis and Field Personality Inventory (Janis and Field). These two tests provided us with a measure of your original level of self-esteem. After you talked to the "Psychologist", you were given a booklet divided into two parts. Each part was a split-half of the self-esteem questions of the above mentioned inventories. This test provided us with a measure of your consequent level of self-esteem after the experimental manipulation, ie. after you were appraised as having masculine or feminine characteristics (or after receiving no evaluation, if you were in the "control group"). Below are your test scores:

	<u>PRE-TESTS</u>		<u>POST-TESTS</u>
<u>CPI</u>	<u>Janis and Field</u>	<u>CPI</u>	<u>Janis and Field</u>
_____	_____	_____	_____
Average Score: of group	_____	_____	_____

As you may note by the results indicated above, your level of self-esteem

Sorry for the rather informal format of my letter. This procedure was adopted in view of time pressures and the great number of reports we had to send. However, I want you to know that I will be glad to answer any further questions you may have. Thank you for participating in this experiment.

Sincerely,

Sandra L. Whitaker

Jean

According to the "Others Appraisal Scales", you answered in the experiment, you definitely perceive men and women as follows:

MEN	WOMEN
1) Mind things when they are not in order	1) Weak personality
2) Very independent	2) Able to devote self to others
	3) Very kind
	4) Feelings easily hurt
	5) Interested in own appearance

Jean

The scales also show a tendency to occasionally ascribe the following characteristics to men and women:

MEN	WOMEN
1) Very practical	1) Very submissive
2) Always hides emotions	2) Feelings easily hurt
3) Interested in detail	3) Able to devote self to others
4) Fairly ungrateful	4) Very kind
5) Not reckless	5) Interested in own appearance
6) Fairly strict	6) Very talkative

Jean

On the basis of the same test, we feel you perceive yourself as being:

- 1) Very realistic
- 2) Fairly independent
- 3) Very consistent
- 4) Excitable in both major and minor crises
- 5) Fairly talkative
- 6) Dislikes math and science
- 7) Helpful to others
- 8) Sky
- 9) Very understanding to others
- 10) Retiring

The majority of the students who participated in this experiment view men as being:

aggressive
 independent
 not emotional
 almost always tends to hide his emotions
 objective
 likes math and sciences
 not always helpful to others
 competitive
 adventurous
 doesn't give up easily
 outgoing
 has a tendency to act as a leader
 loud
 self-confident
 cold in his relations to others (has a tendency)
 doesn't express tender feelings easily
 forward
 not always affectionate

The same group perceives women as being:

feelings easily hurt
 cries easily
 submissive
 interested in own appearance
 kind
 difficulty in making decisions
 excitable in both minor and major crises
 worries easily
 tends to feel inferior
 feels uncomfortable about being aggressive
 is home oriented
 understands others
 dependent
 easily influenced by others
 tactful
 unable to separate feelings from ideas
 passive
 has a strong need for security
 is able to devote herself completely to others

This information is being sent to you in case you want to compare your perceptions of men and women with those of the majority of college students who participated in this experiment.

APPENDIX F

ANOVA TABLES

TABLE 13
 Analysis of Variance
 Summary Table for Pre and Post Janis & Field
 Self-Esteem Scores

Source of Variance	df	MS	F	η^2
SEX	1	477.92	6.84*	.04
EVALUATION	2	89.96	1.29	.01
SEX X EVALUATION	2	15.34	-	-
S (S X E)	138	69.87	-	-
PRE-POST	1	331.53	24.87**	.03
SEX X PRE-POST	1	124.03	9.30*	.01
EVAL. X PRE-POST	2	28.58	-	-
SEX X EVAL. X PRE-POST	2	3.41	-	-
S (S X E) X PRE-POST	<u>138</u>	13.33	-	-
	287			

*p < .01

**p < .001

TABLE 14

Analysis of Variance
Summary Table for Pre and Post Janis and Field Male Scores

Source of Variance	df	MS	F	η^2
EVALUATION	2	27.59	-	-
S (E)	69	61.40	-	-
PRE-POST	1	430.56	29.01*	.07
EVAL. X PRE-POST	2	10.34	-	-
S (E X PRE-POST)	<u>69</u>	14.84	-	-
	143			

*p < .001

TABLE 15

Analysis of Variance
Simple Main Effects
Summary Table for Janis and Field Pre and Post Test Scores

Source of Variance	df	MS	F	η^2
Sex on Pre	1	57.51	-	-
Sex on Post	1	544.44	7.79*	.09

*p < .01

TABLE 16

Analysis of Variance
Summary Table for Pre and Post CPI Self-Esteem Scores

Source of Variance	df	MS	F	η^2
SEX	1	171.13	4.65*	.02
EVALUATION	2	61.29	1.66	-
SEX X EVALUATION	2	2.04	-	-
S (S X E)	138	36.82	-	-
PRE-POST	1	70.01	6.20**	.01
SEX X PRE-POST	1	2.00	-	-
EVAL. X PRE-POST	2	7.27	-	-
SEX X EVAL. X PRE-POST	2	8.37	(.74)	-
S (S X E) X PRE-POST	<u>138</u>	11.30	-	-
	287			

*p < .05
**p < .025

TABLE 17

Analysis of Variance
Summary Table for Pre and Post CPI Self-Acceptance Scores

Source of Variance	df	MS	F	η^2
SEX	1	39.76	5.06*	.003
EVALUATION	2	24.45	3.11**	.03
SEX X EVALUATION	2	6.19	-	-
S (S X E)	138	7.86	-	-
PRE-POST	1	137.50	40.21***	.08
SEX X PRE-POST	1	.01	-	-
EVAL. X PRE-POST	2	1.28	-	-
SEX X EVAL. X PRE-POST	2	1.05	-	-
S (S X E) X PRE-POST	<u>138</u>	3.42	-	-
	287			

*p < .01
 **p < .05
 ***p < .001

TABLE 18

Analysis of Variance
Summary Table for Pre and Post CPI Social Presence Scores

Source of Variance	df	MS	F	η^2
SEX	1	63.28	3.84*	.02
EVALUATION	2	11.73	-	.01
SEX X EVALUATION	2	28.45	-	-
S (S X E)	138	16.49	-	-
PRE-POST	1	357.78	65.49**	.10
SEX X PRE-POST	1	6.42	-	-
EVAL. X PRE-POST	2	2.34	-	-
SEX X EVAL. X PRE-POST	2	5.37	(.98)	-
S (S X E) X PRE-POST	<u>138</u>	5.46	-	-
	287			

*p < .05

**p < .001

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