

1990

Masculinity and femininity in female managers

Vonda Kay Fritch
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Masculinity and femininity in female managers

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San Jose State University, 1990

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MASCULINITY AND FEMININITY IN FEMALE MANAGERS

A Thesis

Presented to

the Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

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August, 1990

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Masculinity and Femininity in Female Managers

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Running head: MASCULINITY AND FEMININITY

Footnotes

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Abstract

Although the percentage of women in the work force is increasing, they have been unable to significantly increase their percentage in managerial positions. The findings from recent research suggest that achieving managerial positions involves acquiring masculine characteristics. Studies suggest that certain characteristics are more appropriate for managers than others, but little research has been done measuring masculinity and femininity directly. In addition, few studies compare managers and nonmanagers. This study assessed the characteristics of managers and nonmanagers using two questionnaires to determine differences between the groups. The results indicated that, in confirmation of past literature, the female managers surveyed were closer to the masculine or assertive stereotype than the nonmanagerial females. And the managers, overall, were closer to this profile than the nonmanagers. These findings suggest that although the work force is becoming less sex-typed, managers continue to be closer to the masculine or assertive stereotype than nonmanagers.

Masculinity and Femininity in Female Managers

Women are rapidly increasing their percentage in the work force; however, they have not been able to significantly increase their percentage in managerial ranks. Although women make up almost half the work force, only 18 percent of the managerial complement is female (Donnell & Hall, 1980) and only 1.7 percent of corporate officers are women (Morrison, White, & Van Velsor, 1987). Much research has been conducted to investigate the reasons why women continue to occupy a disproportionately small number of management positions. Previous studies have looked at male and female perceptions of women as managers (Brown, 1979), the stereotypical view of the managerial role (Powell & Butterfield, 1979; Schein, 1973, 1975), the attitudes of subordinates toward male and female managers (Liden, 1985), and the self-evaluations and leadership styles of male and female managers (Deaux, 1979; Donnell & Hall, 1980). Recent findings by Morrison et al. (1987) suggest that to be successful in managerial positions, women must deny feminine characteristics which are incongruent with the role of manager, such as sensitivity and gentleness, and take on more stereotypically masculine ones such as dominance and assertiveness. This study was conducted to investigate whether a sample of female managers perceive themselves to be more masculine than their nonmanagerial counterparts. Managers and nonmanagerial personnel of both

sexes were included in the study to determine if managers perceived themselves to be more masculine than nonmanagerial personnel, overall, and specifically, if female managers saw themselves as more similar to male managers than to female nonmanagerial personnel.

There is a growing body of literature addressing the issue of discrimination against women in the work place. Concern about the equality of men and women in organizational settings has tended to focus on the stereotypes and biases which are frequently directed toward the female manager. Considerable research has shown that men and women are viewed differently. Sex-role stereotyping in the work place asserts that women lack the leadership abilities required for managerial positions. Leadership abilities are more associated with the stereotypical masculine characteristics of independence, assertiveness, objectivity, and competitiveness, than they are with the stereotypical feminine characteristics of gentleness, sensitivity, and passiveness (Bryce, 1970; Cecil, Paul, & Olins, 1973). Females are seen as possessing feminine sex-typed characteristics that may be undesirable for a managerial position (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972), and the performance and credentials of women are rated less favorably than those of equivalent men (Deaux & Taynor, 1973). Basil (1973) discovered that personal attributes rated as highly important in upper management positions were perceived to be found

in men more than women. Rosen and Jerdee (1974) found that in applications for a managerial position in which only sex of the applicant varied, male applicants were rated higher by both sexes and recommended for hiring more often than female applicants. Shaw (1972) reported that females were less likely than males to be evaluated positively as candidates for management trainee positions.

Many studies have focused on the characteristics of male and female managers to see if there are actual differences. Schein (1973, 1975) discovered that both male and female managers agreed on a stereotypic masculine profile of the successful manager. Results from self-evaluations done in a laboratory setting indicate that men and women report the same differences in themselves that their subordinates observe. Given identical performances, men tended to see their performance as better than the women saw theirs (Deaux, 1976; Deaux & Farris, 1977). When conducting the same research in an organizational setting, Deaux (1979) found that men evaluated their performance more favorably than did the women, and rated themselves as having more ability and greater intelligence. In contrast, Donnell and Hall (1980) compared the managerial behavior of nearly 2,000 managers and found that women, in general, do not differ from men, in the ways in which they administer the management process. The incongruity between the perceptual and behavioral

findings of the studies cited above suggests that perhaps the self-esteem level of the managers may be a factor in how they perceive their effectiveness.

There has been some change in the theoretical conception of sex-role stereotypes. In research that received widespread attention, Bem (1974, 1975) advocated the concept of androgyny, referring to a high proportion of both feminine and masculine characteristics in an individual, as representing a more flexible standard of psychological health than sex-typed behavior. An association between androgyny and more effective behavior was observed in a variety of non-organizational situations (Bem, 1975; Heilbrun, 1976). Powell and Butterfield (1979) applied the concept of androgyny to the work setting to see if the more effective manager would be seen as androgynous. The results indicated an overwhelming preference for a stereotypically masculine manager. Over 65 percent of both male and female subjects characterized a good manager in strongly masculine terms such as assertive, competitive, and dominant. In a more recent study, Goktepe and Schneier (1989) found that regardless of sex, group members with masculine gender role characteristics emerged as leaders significantly more often than those with feminine, or androgynous gender role characteristics. According to the results of the above studies, attitudes and behaviors of both men and women suggest that "masculine is best in management."

The use of the terms masculinity and femininity as one-dimensional constructs, independent of each other, to assess individuals has been challenged by the research of Janet Spence. She has proposed that gender-related attitudes, attributes, and behaviors are multidimensional and the relations of these qualities to the self-concepts of femininity or masculinity are much different than has traditionally been assumed (Spence, 1983). Thus, the self-report questionnaires, such as the Bem Sex-Role Inventory, actually measure two more specific clusters, dominance and nurturance/warmth, instead of the all-encompassing concepts of masculinity and femininity. In Payne's review (1985) of the Bem Sex-Role Inventory agreed with the Spence conclusions, stating that the content of the scales does not cover a full range of the ways in which males and females stereotypically differ in American society. Instead the items deal with more circumscribed, but also important, domains. In the case of the masculinity scale, the domain has been described as dominance or instrumentality--independence, decisiveness, self-assertiveness; and in the case of the femininity scale, as nurturance, nurturance-warmth, or expressiveness--emotionality and awareness of others' feelings (Payne, 1985). Payne did say, however, that the short version of this instrument, developed later by Bem (1981), provides promising indices of the degree to which people describe themselves as having dominant/assertive or

expressive/nurturant tendencies.

The number of women in management positions has been increasing slowly, due perhaps to changes in cultural norms concerning the role of women and the impetus of federal legislation banning sex discrimination at all levels of organizations. As more women become managers, it is possible that masculine-oriented standards for management behavior are being displaced by androgynous or even feminine standards, more so than earlier research has indicated. On the other hand, it is possible that new female managers adopt assertive behaviors that are typical of male managers to succeed in a managerial role that may still be considered a masculine one. In a recent study, Morrison et al.(1987) interviewed female managers and those responsible for recommending persons to fill managerial positions. They found that women do feel that they must adopt masculine or assertive characteristics seen as necessary for managers, and must shed feminine characteristics which are viewed as incongruent with the managerial role. A self-evaluation was not done to determine if these women actually perceived themselves as more masculine or assertive and, if so, which characteristics they had adopted or suppressed.

The Current Study

Although there is a vast amount of research on the subject of women in management, few studies have focused on self-reported characteristics of

managers to determine whether they perceive themselves to be more masculine than nonmanagerial individuals. If, as theory seems to suggest, female managers take on stereotypically masculine characteristics, then they should perceive themselves to be more similar to the masculine stereotype than nonmanagerial females. The present study was designed to explore these theoretical assumptions further.

One of the purposes of the study was to examine the Short Bem Sex-Role Inventory (SBSRI; Bem, 1981) in relationship to a broader range of personality characteristics. The Taylor-Johnson Temperament Analysis (T-JTA; Taylor & Morrison, 1966) contains nine trait subscales and was used for comparison. Although males and females are scored differently on the T-JTA, there is no research relating scale scores to the concepts of masculinity and femininity. In this study, the non-gender-adjusted scores from the T-JTA were used to avoid differential changes for males and females. These instruments were examined both in their relationship to each other and to the concepts of masculinity and femininity. Specifically, there were three hypotheses. First, in a factor analysis, the SBSRI masculinity scale would load highest on a masculinity factor, and the SBSRI femininity scale would load highest on a femininity factor. Second, the T-JTA subscales would also reflect the two factors of masculinity and femininity, with self-discipline, hostile, dominant, and active-

social loading on the masculinity factor and nervous, depressed, expressive-responsive, sympathetic, and subjective loading on the femininity factor, according to the gender stereotypes revealed in past literature. Third, female managers would score higher on the masculine scale than female nonmanagers, and managers overall would score higher on the masculine scale. Thus, male and female managers would score similarly on the masculinity measure, whereas nonmanagers would have scores more similar to gender norms, indicating an interaction of gender measures and management position (see Figure 1).

METHOD

Research Participants

A packet containing the questionnaires used in the study, a demographic form, and a letter explaining the study and requesting participation was distributed to all employees at a research facility for a large financial services corporation. Eighty-one employees completed and returned the questionnaires for a 55% participation rate. The participants represented four groups. The first group consisted of eighteen female middle managers. The second group consisted of sixteen male middle managers. The third group consisted of thirty female subordinates who were not in a managerial position. The last group consisted of seventeen nonmanagerial male employees.

Expected Interaction Masculinity Scores By Gender and Management

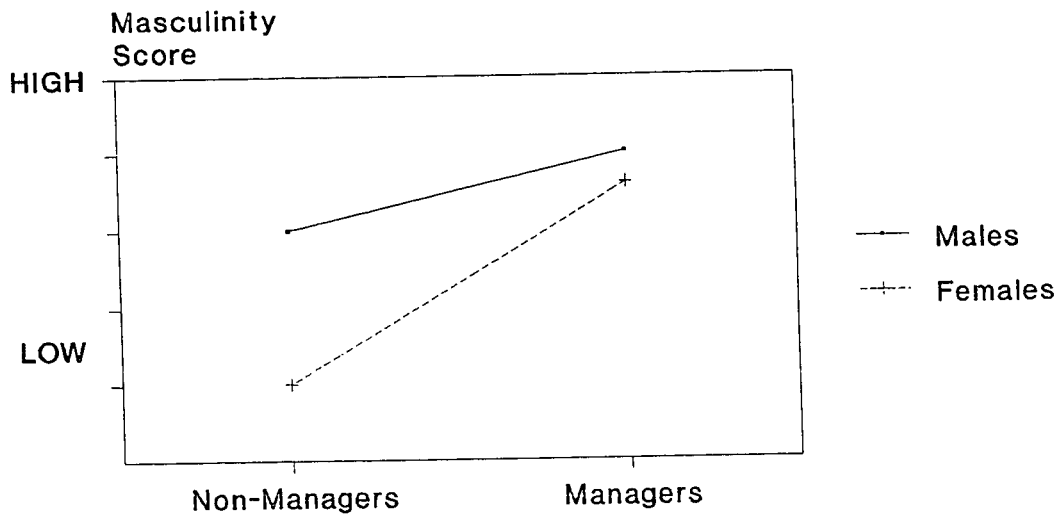


Figure Caption

Figure 1. Expected interaction of masculinity scores by gender and management.

Measures

Each subject completed the following measures:

1. A brief demographic form indicating gender, age, type of position, and length of time employed with the company.
2. The Short Bem Sex-Role Inventory (Bem, 1981), which consists of 10-item Masculinity and 10-item Femininity scales and 10 filler items. The SBSRI was used to obtain a general score of dominance (masculinity) and nurturance (femininity) for all subjects.
3. The Taylor-Johnson Temperament Analysis (Taylor & Morrison, 1966), which consists of 180 short questions dealing with several personality characteristics. The T-JTA was used to obtain additional scores on related characteristics. It contains subscales of characteristics that may be related to masculinity or femininity. The subscales include nervous (vs. composed), depressive (vs. light-hearted), active-social (vs. quiet), expressive-responsive (vs. inhibited), sympathetic (vs. indifferent), subjective (vs. objective), hostile (vs. tolerant), dominant (vs. submissive), and self-disciplined (vs. impulsive).
4. The Self-Esteem Scale developed by Rosenberg (1965), which consists of ten items that deal with global self-esteem (e.g., the degree to which

the person approves of herself). The items were answered on a four-point Likert scale from strongly agree to strongly disagree and were scored on an additive basis with negatively worded items being reversed in scoring so that all items were keyed in a positive direction. The scores to this scale were collected for exploratory reasons and no hypothesis was articulated concerning the results.

RESULTS

Correlations of all variables used in the data analyses are listed in Table 1. The first two hypotheses asserted that all test scales used in the study (the SBSRI and T-JTA subscales) would load on two general factors--masculinity and femininity. Using LISREL VI (Joreskog & Sorbom, 1984), confirmatory factor analysis was done to determine the relationship of these scales to the hypothesized factors. To determine the fit of the two-factor model, the SBSRI masculinity scales and the T-JTA subscales of active-social, hostile, dominant, and self-disciplined were forced on one factor of masculinity, while the SBSRI femininity scores and the T-JTA subscales of nervous, depressive, expressive-responsive, sympathetic, and subjective were forced on the second factor of femininity. The results indicated that the two-factor model did not fit as hypothesized. The $\chi^2(54) = 232.56$, $p < .001$. The goodness of fit index was .68, and the adjusted goodness of fit was -.04. The root mean square

Table 1

Correlation Matrix for all Variables

<u>Variables</u>	<u>Mas</u>	<u>Fem</u>	<u>Ner</u>	<u>Dep</u>	<u>Act</u>	<u>Exp</u>	<u>Sym</u>	<u>Sub</u>	<u>Dom</u>	<u>Hos</u>	<u>Dis</u>
Feminine	.05										
Nervous	-.09	-.31*									
Depressed	-.18	-.27*	.59*								
Active	.33*	.33*	-.11	-.32*							
Expressive	.37*	.43*	-.29*	-.42*	.47*						
Sympathetic	.05	.68*	-.25*	-.33*	.43*	.51*					
Subjective	-.36*	-.30*	.56*	.65*	-.25*	-.46*	-.30*				
Dominant	.72*	-.01	-.22*	-.34*	.46*	.31*	.06	-.38*			
Hostile	.17	-.47*	.54*	.48*	-.17	-.26*	-.51*	.52*	.02		
Disciplined	.06	.25*	-.33*	-.34*	.02	.15	.14	-.42*	-.42*	.13	
Esteem	.28*	.24*	-.34*	-.47*	.28*	.38*	.13	-.42*	.30*	-.29*	.29*

* $p \leq .05$

residual was .25. The loadings and standard errors for all variables included in the model are listed in Table 2. The modification indices revealed that several of the subscales were not loading as predicted on the hypothesized factor, and some were not loading at all on either factor. According to Sorbom (1989), the modification indices measure how much the discrepancy between the model and the data can be reduced, as defined by a general fit function, when one parameter at a time is added or freed. Modification of a model is intended for a situation such as this one, where a specific model was hypothesized on the basis of a substantive theory. Rather than accept the fact that the specified model did not fit, it seemed more sensible to modify the model to try to make it fit the data better. Thus, in light of the findings from the two-factor confirmatory factor analysis, the model was modified and a third, unnamed factor was added, on which all entries were allowed to vary. From this analysis, the $\chi^2(42) = 76.2, p < .001$. Thus, although the items fit better on the three-factor model, the chi-square was still significant. Therefore, the modified model did not confirm the assumption that perhaps the data would fit on a three-factor solution. The goodness of fit index was .87, and the adjusted goodness of fit index was .73. The root mean square residual was .08.

There are several interpretations for when a model does not fit. One possibility is that these findings indicate that the subscales forced onto the

Table 2

Factor Loadings and Standard Errors For Two-Factor Model

	Masculine		Feminine	
	Loading	Standard Error	Loading	Standard Error
Masculine	.76	.11		
Feminine	^a		.50	.11
Nervous			-.67	.11
Depressed	^b		-.78	.10
Active	.48	.11	^c	
Expressive	^d		.60	.11
Sympathetic	^e		.52	.11
Subjective	^f		-.78	.10
Dominant	.93	.11		
Hostile	.02	.12	^g	
Disciplined	.13	.12	^h	

^a Modification Index = 2.26

^b Modification Index = 1.51

^c Modification Index = 5.16

^d Modification Index = 3.09

^e Modification Index = 1.10

^f Modification Index = 4.99

^g Modification Index = 32.70

^h Modification Index = 10.45

masculinity factor were not measuring masculinity as hypothesized, and the subscales forced onto the femininity factor were not measuring femininity. Another possibility may be that the small sample size prevents adequate measurement of true underlying factors. The loadings and standard errors of the variables used in the three-factor modified analysis are listed in Table 3. The SBSRI masculinity scale did load on the masculinity factor as expected, along with the T-JTA dominant subscale. The SBSRI femininity scale also loaded on the femininity factor as expected, as did the T-JTA sympathetic subscale.

These results support the assertions of both Spence (1983) and Payne (1985) that the masculinity scale is actually a measure of a more specific factor of dominance, and the femininity scale is actually a measure of a more specific factor of nurturance or sympathy. The first hypothesis was confirmed by the analyses conducted using LISREL; however, the second hypothesis was not. The T-JTA subscales did not load on the factors hypothesized. The subscales of active, expressive, and self-disciplined loaded positively on the third factor, while nervous, depressed, subjective, and hostile loaded negatively (see Table 3). The measures that loaded negatively are highly correlated with each other, but negatively correlated with the other scales and the same thing holds true for the scales that loaded positively on the third factor. It must be noted that this

Table 3

Factor Loadings and Standard Errors For Three-Factor Model

	Masculine		Feminine		Other	
	Loading	Standard Error	Loading	Standard Error	Loading	Standard Error
Mascul	.83	.10			.29	.12
Feminin			.53	.12	.53	.11
Nervous			.18	.11	-.67	.10
Depress			.17	.10	-.77	.10
Active	.31	.11			.43	.11
Express			.23	.11	.59	.11
Sympath			.72	.14	.58	.12
Subject			.22	.10	-.80	.10
Dominant	.73	.10			.39	.11
Hostile	.43	.10			-.70	.10
Discipl	-.09	.11			.44	.11

analysis was exploratory in nature, and more research with other samples needs to be done to determine the true fit of the three-factor model.

Finally, it was hypothesized that female managers would perceive themselves to be closer to the masculine stereotype than female nonmanagers, and managers overall would perceive themselves to be closer to the masculine stereotype than nonmanagers. A 2x2 analysis of variance was done to determine the relationship of masculinity, measured by the SBSRI masculinity scale, with management and gender. The results revealed that the main effect of management/nonmanagement was significant, but the main effect of gender was not significant (see Table 4). Although there was no significant interaction, all means were in the hypothesized direction (see Figure 2). The lack of significance may be a result of low power from using such a small sample size. Thus, the third hypothesis was not supported by a significant interaction effect with this sample.

A look at the mean differences between managers and nonmanagers in Table 5 indicates that the managers are closer to the masculine stereotype, scoring significantly higher than nonmanagers on masculinity ($p \leq .05$) and dominance ($p \leq .05$), and scoring significantly lower on depressed and subjective ($p \leq .05$). The significant difference holds true for managers versus nonmanagers ($p \leq .01$), even though there are no significant differences

Table 4

Results From Analysis of Variance with SBSRI Masculinity Score as the
Dependent Variable

	Manager	Nonmanager	
Male	49.22	47.94	48.60
Female	52.69	45.47	47.98
	50.85	46.36	48.25

<u>Source of Variance</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Main Effects	398.27	2	199.14	3.10	.051
Gender	.32	1	.32	.01	.944
Mgr/Nonmgr	390.59	1	390.59	6.07	.016
Two-Way Interactions					
Gender-Mgr/Nonmgr	167.84	1	167.84	2.61	.110
Explained	566.11	3	188.70	2.93	.039
Residual	4954.96	77	64.35		
Total	5521.06	80	69.01		

Masculinity Scores Gender by Management

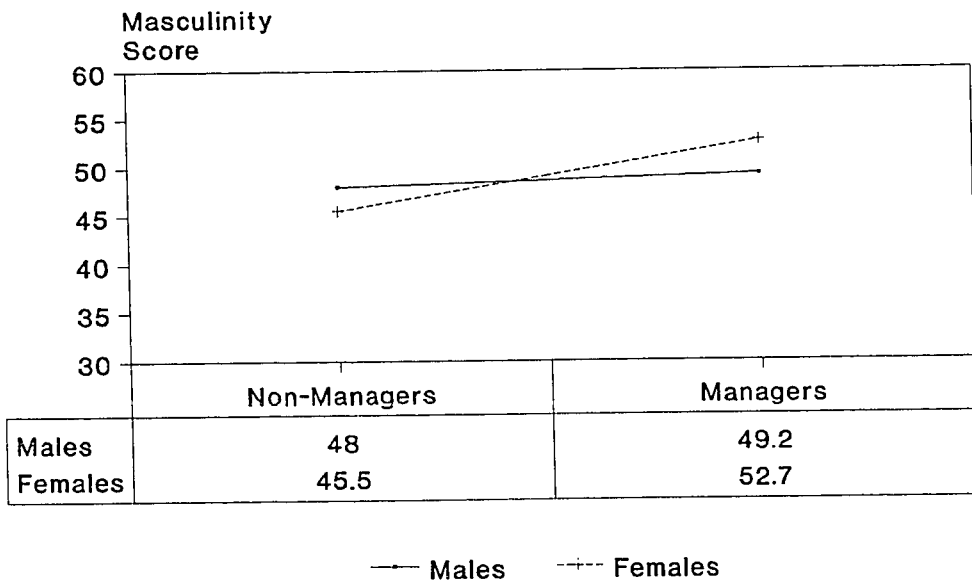


Figure Caption

Figure 2. Gender by management masculinity scores.

Table 5

Mean Differences Between the Survey Groups

<u>Subscales</u>	All		Males		Females		Non-Managers		Managers	
	M	SD	M	SD	M	SD	M	SD	M	SD
Masculinity	48.2	8.3	48.6	7.6	48.0	8.9	46.4	7.9	50.8	8.3
Femininity	54.4	8.3	53.4	8.4	55.2	8.3	56.0	9.4	52.4	6.1
Nervous	12.4	7.3	12.4	8.3	12.4	6.5	13.6	6.3	10.8	8.3
Depressed	9.0	7.6	8.6	7.0	9.4	8.2	10.8	8.2	6.6	6.4
Active	24.8	7.6	24.3	6.9	25.3	8.0	25.4	8.2	24.2	6.7
Expressive	27.9	8.4	28.1	8.2	27.8	8.7	28.5	8.8	27.1	7.9
Sympathetic	29.7	6.4	29.2	6.5	30.2	6.4	30.0	7.4	29.4	5.0
Subjective	12.4	7.0	12.2	7.2	12.6	7.0	13.8	7.5	10.6	5.8
Dominant	22.9	6.3	23.7	5.3	22.3	7.0	21.4	6.4	24.9	5.7
Hostile	11.3	7.1	11.6	7.5	11.1	6.8	11.7	6.8	10.8	7.5
Self-Disciplined	24.4	7.4	22.9	7.5	25.6	7.2	24.5	7.2	24.3	7.8

between the means for males and females.

To look more closely at how managers differ from nonmanagers, a stepwise multiple regression was done which included all of the SBSRI and T-JTA subscales regressed on a dichotomous indicator of management/nonmanagement. Because some research indicates that self-esteem is related to managers' perceived effectiveness and, therefore, perhaps their position, the score from Rosenberg's Self-Esteem Scale was included in the analyses by adding it into the regression equation. The results revealed that self-esteem was not a predictor of the management/nonmanagement dichotomy, and that none of the subscales accounted for much of the variance. As revealed in Table 6, dominance, active, and depressed were the three subscales that significantly predicted management at the $p < .05$ level. From these results, it could be concluded that managers are dominant and are not active or depressed. However, these three subscales accounted for only 15% of the total variance (see Table 6).

Another factor that may be related to management/nonmanagement is the length of time an individual has been with a company. To address the question of whether length of service is a covariate of management/nonmanagement, a multivariate analysis of covariance was conducted with all SBSRI and T-JTA subscales as the dependent variables, gender and

Table 6

Results From Stepwise Multiple Regression^a

<u>Variables</u>	<u>Management/Nonmanagement</u>
Dominant	.326** (.119)
Active	-.314** (.118)
Depressed	-.260* (.112)
<hr/>	
R ²	.43
Adj. R ² ^b	.15
F	5.78***
df	80

^a Standardized regression weights are reported with Standard Errors in parentheses.

^b Adjusted R² is a more conservative estimate of the percent of variance explained, especially when the sample size is small. The formula used is:

$$\text{Adjusted } R^2 = R^2 - \left\{ \frac{k-1}{N-k} \right\} (1-R^2)$$

- * p ≤ .05
- ** p ≤ .01
- *** p ≤ .001

management/nonmanagement as the independent variables, and length of service as the covariate. The results revealed that length of service did not significantly moderate the relationship between management/nonmanagement and gender and the dependent measures.

DISCUSSION

Several interesting findings emerged from the present investigation. First, the results indicated that, as earlier research has suggested, the SBSRI masculinity and femininity scales load on two separate factors, but the factors should be labeled more specifically dominance and nurturance or sympathy rather than masculinity and femininity. Second, it was determined that the T-JTA may not adequately assess components of masculinity and femininity. The authors of the instrument assert that although some of the subscales are intercorrelated, they are all measuring independent concepts separate from masculinity and femininity. Past literature had indicated that characteristics such as nervous, depressed, subjective, expressive and sympathetic are stereotypically feminine characteristics and characteristics such as active, dominant, hostile and disciplined are stereotypically masculine. However, the analyses of the T-JTA subscales failed to confirm these assumptions.

It can be concluded from the results of the analysis of variance that managers perceive themselves to be closer to the masculine stereotype than

nonmanagers. The masculinity score for managers was over four points higher than the masculinity score for nonmanagers. And, although males scored higher on the masculinity scale than females, female managers scored the highest of any of the groups on the masculinity scale. This may suggest that female managers feel the need to overcompensate with stereotypically masculine characteristics to succeed in their managerial position. On the other hand, it is possible that highly masculine females are more likely to become managers. There was not a main effect for management/nonmanagement and gender.

Although this study has revealed some significant relationships, it is not without some flaws that need to be addressed. For example, the sample size was quite small for the analyses conducted. Also, the sample was one of convenience. The small sample was taken from one setting and consisted entirely of persons who are defined within the setting as researchers regardless of their position as manager or nonmanager. This circumstance may have had an effect on the results and certainly limits the generalizability of the present findings.

While this study is a typical field investigation in that the sample is not random and the controls are imperfect, the author feels that the findings are, nevertheless, important. The managers did fit into the masculine stereotype, with female managers scoring the highest on the masculinity scale. This

suggests either that females managers take on characteristics that are considered masculine or that women who have these characteristics to begin with are more likely to become managers.

There may be differences between managers and nonmanagers that were not detected in this study, and these differences should be explored further. However, future research should involve finding not predictors of management/nonmanagement, but predictors of effectiveness in management, regardless of gender. Research needs to go beyond the masculine/feminine stereotypes, including research stereotypes. Gender is convenient, but as this study revealed, it may not be a highly potent explanatory variable. As we continue moving toward a non-gender-typed work force, other more relevant issues should come into play.

It may be possible that the situation or environment controls the behavior or traits of the individual. The characteristics displayed by a manager in the work place may be situationally appropriate, but may not necessarily be inherent characteristics of that individual. The stress factor may also account for the behaviors and characteristics of both managers and nonmanagers in the work place. Diamond and Allcorn (1990) present some interesting ideas on stress and its detrimental effect in the work environment. More research needs to be done to discover how much the amount of stress and situational constraints

determine the personality profile and effectiveness of both managers and nonmanagers.

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December 12, 1989

TO: Vonda Fritch, MA in Psychology candidate

FROM: Kevin Jordan, MA Coordinator 

RE: Design and Analysis Review

Dr. Hicks and I reviewed your thesis proposal for the Design and Analysis Committee. Our comments are attached. As you can see, both of us approve your beginning data collection. We hope you take the comments into account, especially Dr. Hicks' comment on experience level as a possible covariate, prior to data collection.

All of my comments are related to format and statistical issues which I hope you will address in the final version of your thesis.

Congratulations on your progress to date! Good luck with the project.

cc: Weckler
Hicks
Jordan
Moore
Payne
file

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To: Vonda K. Fritch, Psychology

From: Charles R. Bolz
Office of Graduate Studies and Research

Date: December 13, 1989

RB.

The Human Subjects Institutional Review Board has approved your request to use human subjects in the study entitled:

"Masculinity and Femininity in Female Managers"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact Dr. Stanford or me at 4-2480.

cc: David K. Weckler, Ph.D.

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