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ABSTRACT

A sample of 407 (224 males and 183 females with a median age of 29.4 years) part-time business students enrolled in evening programs at 3 colleges were surveyed to determine whether the attributes of successful middle managers correspond more strongly with the attributes of career women than with those of women in general. The students were randomly assigned to four target group conditions (women in general, men in general, career women, and successful middle managers). Each respondent completed one of four versions of the Person Description Index (PDI) to assess estimates of population rates for attributes occurring in the four target conditions. The prevalence of the traits within each target condition were averaged. The study confirmed that sex differences in stereotypes of career women do exist and create a double standard in evaluations of men and women in organizations. The female respondents viewed career women as primarily gaining masculine-positive traits but losing feminine traits that are both positive and negative. Although the male respondents tended to estimate higher prevalence rates on masculine-positive traits for career women compared with women in general, they did not perceive career women as different from women on any of the feminine-negative attributes. (Contains 16 references.) (MN)

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# SUBSTEREOTYPES AND REQUISITE MANAGEMENT CHARACTERISTICS

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This study examined a subtyping formulation of stereotype revision to determine if attributes of successful middle-managers correspond more strongly with those of career women than with women, in general. Participants were male and female part-time (evening) business students. They were randomly assigned to four target-group conditions (women, in general; men, in general; career women; successful middle-manager) for which they estimated prevalence rates of both masculine and feminine traits. Findings indicated that, among female respondents, substereotyping creates requisite characteristics which enable the career woman to be as qualified for managerial positions as men, in general. Sex differences in stereotypes of career women confirm the notion that a double standard exists in the evaluation of men and women in the organization.

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## SUBSTEREOTYPES AND REQUISITE MANAGEMENT CHARACTERISTICS

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Although the representation of women in management has virtually doubled during the past 20 years, this has done little, if anything, to change the belief that women, in general, are unqualified for managerial positions. Two recent studies (Brenner, Tomkiewicz, & Schein, 1989; Heilman, Block, Martell, & Simon, 1989) have shown that characteristics which are ascribed to successful managers correspond very highly with those generally attributed to men, however, there is little resemblance between the attributes ascribed to successful managers and those generally ascribed to women.

One reason for the apparent resistance of stereotypes to change might be the tendency to subcategorize or subtype the attributes of women who do move into the ranks of middle management. It has been suggested (Ashmore, 1981; Brewer, Dull, & Lui, 1981; Taylor, 1981; Weber & Crocker, 1983) that exposure to minority-group members who display stereotype-inconsistent characteristics can produce a hierarchical revision in stereotypes, or a discrimination among members within the minority group, rather than a revision of the characteristics which comprise the superordinate-level category. Thus, a successful female in a middle management position is likely to be regarded as an "exception" and treated as unrepresentative of women, in general; her attributes are subcategorized, with little impact on the beliefs about the qualifications of women, in general.

The present study was designed to examine the subtyping formulation in the common usage of the substereotype "career women," one of four subtypes of women shown (Noseworthy & Lott, 1984) to have distinct and consensual attributes which form a hierarchical grouping in memory. It was reasoned that, because career women are often characterized by

stereotypically masculine attributes (e.g., ambitious, strong-minded, independent), there would be a high degree of resemblance between the attributes of career women and successful middle managers. Furthermore, we explored the possibility that there are sex differences in the processing of stereotype-inconsistent information. Brenner et al. (1989) and others (Massengill & DiMarco, 1979; Schein, 1975) have observed that females may see more concurrence between women and managers than do men. Thus, for women, changes in sex-role stereotypes could be occurring at a superordinate level; while hierarchical revisions of stereotypes might be more characteristic among men.

### METHOD

Participants in this study were 407 part-time business students (224 males; 183 females) (median age = 29.4 yr.) enrolled in evening classes at three area colleges. Virtually all of the respondents held full-time jobs (99.5%), and close to 45% of the sample held supervisory or managerial positions.

The research was described as a university-based investigation concerned with perceptions of people in work settings. Respondents were administered the "Person Description Index" (PDI) to assess estimates of population rates for attributes occurring in specific target groups. The PDI consisted of 40 items adopted from the Extended Personal Attributes Questionnaire (EPAQ; Spence, Helmreich, & Holahan, 1979) and the short form of the Bem Sex Role Inventory (BSRI; Bem, 1981): 32 sex-role attributes were selected from EPAQ<sup>1</sup> (8 masculine-positive, 8 masculine-negative, 8 feminine-positive, 8 feminine-negative) and 8 neutral traits were taken from the BSRI (4 neutral-positive, 4 neutral-negative).

Each respondent completed one of four versions of PDI. The order of distribution of the four versions was random in each class of students. Instructions accompanying the four

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<sup>1</sup>Masculine-positive traits: independent, self-confident, competitive, stands up under pressure, active, makes decisions easily, never gives up easily, feels superior. Masculine-negative traits: egotistical, hostile, cynical, arrogant, boastful, greedy, dictatorial, unprincipled. Feminine-positive traits: helpful, aware of others' feelings, warm to others, gentle, emotional, devoted to others, kind, understanding. Feminine-negative traits: spineless, gullible, servile, subordinates self to others, whiney, complaining, nagging, fussy. Neutral-positives: sincere, truthful, friendly, reliable. Neutral-negatives: unhappy, conceited, jealous, moody.

versions indicated that the respondent should estimate prevalence rate or the percentage of members in a target group who possessed each of the 40 traits listed on the PDI. The target conditions included successful middle-managers (sex unspecified), ( $N_{\text{males}} = 61$ ,  $N_{\text{females}} = 50$ ), men, in general ( $N_{\text{males}} = 53$ ,  $N_{\text{females}} = 49$ ), women, in general ( $N_{\text{males}} = 52$ ,  $N_{\text{females}} = 41$ ), and career women ( $N_{\text{males}} = 58$ ,  $N_{\text{females}} = 43$ ).

## RESULTS/CONCLUSIONS

Data were reduced by averaging the estimated percentages of occurrence (or prevalence rates) for each trait within each target condition. Following previous investigators (Brenner et al., 1989; Heilman et al., 1989) we used the intraclass correlation coefficient ( $r'$ ) for a randomized-groups analysis of variance ( $2 \times 40$ ; target group  $\times$  trait) to assess the degree of correspondence between the descriptions or profiles of estimated prevalence rates for the traits of any two target groups<sup>2</sup>.

Among male respondents, there was a large and significant resemblance between prevalence rates for the traits of successful middle-managers and men, in general ( $r' = .782$ ,  $p < .01$ ), but not for those of successful middle-managers and women, in general ( $r' = .026$ ). The correspondence between descriptions of women and successful managers did strengthen when the target group was career women ( $r' = .324$ ,  $p < .01$ ). However, this intraclass correlation coefficient, reflecting subtyping on the part of men, was significantly lower than the correlation coefficient denoting the correspondence for the traits of men and successful managers ( $z = 3.07$ ,  $p = .002$ ).

For women responding, a significant concordance did exist between estimated prevalence rates for the traits of successful managers and women, in general ( $r' = .306$ ,  $p < .01$ ).

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<sup>2</sup>Intraclass correlation coefficients are frequently used as an index of reliability between the ratings provided by multiple judges of an object (Shrout & Fleiss, 1979). In this study, as in previous work, the intraclass correlation is put to a different use. We were not interested in the similarity of ratings by multiple judges on the PDI; instead, we were interested in the similarity of the estimates evoked by various labels or targets (e.g., successful middle-managers, men, in general). Thus, a high  $r'$  in our study reflects similar profiles for the estimated prevalence rates in sets of target groups and a low  $r'$  reflects differences in the profiles of sets of target groups.

However, the resemblance of females' descriptions of successful managers and men, in general ( $r' = .778$ ,  $p < .01$ ) was significantly stronger ( $z = 2.27$ ,  $p = .02$ ). Furthermore, for female respondents, the  $r'$  computed between estimated occurrence rates for successful managers and career women was significant ( $r' = .631$ ) and statistically equivalent to that obtained between successful managers and men, in general ( $z = .90$ ).

These findings<sup>3</sup> for  $r'$  support and extend upon the results of recent investigations by Brenner et al. (1989) and Heilman et al. (1989); indeed, differences in methodologies and samples notwithstanding, the profile for the successful manager remains decidedly masculine, especially among men. It does appear that there have been some changes in superordinate-level stereotypes among women. Contrary to expectations, however, revisions of their stereotypes mainly have been hierarchical in nature. Thus, for female respondents it is a subcategory or special class of women, rather than women, in general, who have the traits considered to be requisites for management. In order to determine which specific traits might be used differentially by female, as well as male, respondents a series of one-way ANOVAs were conducted on each of traits listed on the PDI<sup>4</sup>.

In summary, the principal findings of these analyses showed that female respondents viewed career women as primarily gaining masculine-positive traits, but losing feminine traits that are both positive and negative in nature. Thus, career women had higher prevalence rates for traits such as "independent," "self-confident," "stands up under pressure," and lower prevalence rates for traits such as "warm to others," "gentle," "emotional," and "devoted to others", as well as "gullible," "whiney," and "nagging". Comparisons between career women

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<sup>3</sup>It is noteworthy that, among female respondents, there was no difference ( $z = 1.55$ ) in the comparison of  $r'$  values for career women and women, in general ( $r' = .746$ ) versus career women and men, in general ( $r' = .534$ ). However, these respective values ( $r' = .730$  and  $r' = .376$ ) were significantly different among male respondents ( $z = 2.27$ ,  $p = .02$ ).

Intraclass correlations also were computed between male and female respondents to identify similarities and differences in their descriptions of the various target groups. Similarities tended to be stronger for descriptions of successful managers ( $r' = .902$ ) and for women, in general ( $r' = .929$ ). The coefficients were slightly lower for the target groups of men, in general ( $r' = .852$ ) and career women ( $r' = .796$ ).

<sup>4</sup>To insure that  $\alpha = .05$  for the entire set of analyses conducted within each sex,  $p < .001$  was used for the individual one-way ANOVAs.

and successful managers indicated that, for female respondents, it is the gain in masculine-positives and the loss of feminine-negatives that qualify the career woman for managerial positions; the majority of feminine-positive traits are still more prevalent for career women than for successful managers.

Consistent with the results for female respondents, male respondents did show a tendency to estimate higher prevalence rates on masculine-positive traits for career women compared with women, in general. Furthermore, males also saw career women as having significantly lower prevalence rates on several of the feminine-positive attributes. But, they did not perceive career women as different from women, in general, on any of the feminine-negative attributes. For the men in our sample, the loss of feminine-positive traits, yet the retention of feminine-negative traits, explained the significant comparisons between career women and successful managers. Such findings are noteworthy in the light of the double standard that can operate in the differential evaluations of men and women in the organization (Doyle, 1983); a businessman, for example, might be good with details, while the business woman is likely to be considered fussy and picky; he might be a hard task master, while she is probably a nagging bitch.

It should be profitable for future researchers to more closely examine both positive and negative gender traits in the creation of substereotypes in the organizational setting. Of greater concern, however, is the woman's assessment of men's substereotypes. Given the differences in males' and females' views of the career woman, it is likely that a female's awareness of substereotyping on the part of men operates as a disincentive for her aspirations for a position in upper management. If this is true, it becomes increasingly important not only to maintain affirmative action pressures, but to insure the institutionalization of remedial actions (see Morrison & Von Glinow, 1990) that promote, at least, shared perceptions of exceptional women in the organization, and, at most, changes in superordinate-level beliefs.

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TABLE 1

INTRACLASS CORRELATIONS COMPUTED ON ESTIMATES  
OF PREVALENCE FOR TARGET GROUP CONDITIONS

Target Group	1	2	3	4
1 Successful Managers	-	(.324 <sup>*1</sup> )	(.026 <sup>*</sup> )	(.782 <sup>*2</sup> )
2 Career Women	.631 <sup>*2,3</sup>	-	(.730 <sup>*2</sup> )	(.376 <sup>*2</sup> )
3 Women, in general	.306 <sup>*1,2</sup>	.746 <sup>*3</sup>	-	(.095 <sup>*</sup> )
4 Men, in general	.738 <sup>*3</sup>	.484 <sup>*1,2</sup>	.273 <sup>*1</sup>	-

Above diagonal =  $r'$  values for male respondents; below diagonal =  $r'$  values for female respondents. Asterisked values differed significantly from zero; values that differed significantly do not share a common superscript.

TABLE 2

MEAN ESTIMATED PREVALENCE RATES OF ATTRIBUTES  
FOR TARGET GROUPS (FEMALE RESPONDENTS)

Trait	TARGET GROUP			
	Successful Managers	Career Women	Women, in general	Men, in general
M-pos	69.67 <sup>a</sup>	68.02 <sup>a</sup>	61.66	68.42 <sup>a</sup>
M-neg	49.16 <sup>ab</sup>	43.17 <sup>b</sup>	41.30 <sup>b</sup>	54.62 <sup>a</sup>
F-pos	49.12 <sup>a</sup>	63.27 <sup>b</sup>	71.35	52.86 <sup>a</sup>
F-neg	41.11 <sup>a</sup>	42.88 <sup>a</sup>	50.09	42.15 <sup>a</sup>
N-pos	58.65 <sup>a</sup>	68.56 <sup>b</sup>	68.59 <sup>b</sup>	56.42 <sup>a</sup>
N-neg	48.38 <sup>a</sup>	50.88 <sup>a</sup>	54.54 <sup>a</sup>	56.93 <sup>a</sup>

Means that do not share a common superscript within a row differed significantly ( $p < .01$ ) based on Duncan's Multiple Range Test.

**TABLE 3**

**MEAN ESTIMATED PREVALENCE RATES OF ATTRIBUTES  
FOR TARGET GROUPS (MALE RESPONDENTS)**

Trait	TARGET GROUP			
	Successful Managers	Career Women	Women, in general	Men, in general
M-pos	65.62 <sup>a</sup>	61.48 <sup>a</sup>	56.64 <sup>a</sup>	61.72 <sup>a</sup>
M-neg	50.83 <sup>a</sup>	44.42 <sup>a</sup>	44.19 <sup>a</sup>	51.05 <sup>a</sup>
F-pos	43.49 <sup>a</sup>	61.88 <sup>b</sup>	73.21	49.33 <sup>a</sup>
F-neg	39.90 <sup>a</sup>	49.65 <sup>b</sup>	51.11 <sup>b</sup>	38.79 <sup>a</sup>
N-pos	56.71 <sup>a</sup>	63.75 <sup>b</sup>	70.29 <sup>b</sup>	57.69 <sup>a</sup>
N-neg	48.02 <sup>a</sup>	53.38 <sup>a</sup>	57.95 <sup>a</sup>	49.80 <sup>a</sup>

Means that do not share a common superscript within a row differed significantly ( $p < .01$ ) based on Duncan's Multiple Range Test.