

SEX-ROLE ATTITUDE AS A MODERATOR IN THE RELATIONSHIP  
BETWEEN LOCUS OF CONTROL AND *n* ACHIEVEMENT

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*Summary.*—This study examined the relationship between locus of control and *n* Achievement as moderated by Bem and Watson's (1976) recently reconceptualized measures of "masculinity," "femininity," and "androgyny." The Bem (1974) Sex-role Inventory, Rotter (1966) Internal-External (I-E) Locus of Control Scale, and Mehrabian (1969) *n* Achievement Scale were administered to 130 male and 81 female university students. *n* Achievement and I-E scores were significantly and negatively correlated ( $r = -.54$ ,  $df = 32$ ,  $p < .02$ ) for androgynous females, indicating a tendency for *n* Achievement to increase as feelings of external control decrease. All other relationships were non-reliable. These findings were interpreted with regard to related empirical and theoretical issues in the literature.

The topics of achievement motivation, locus of control, and sex-role attitudes have been the basis for numerous studies. Minnigerode (1976) has recently presented evidence indicating that sex-role stereotyped individuals, both male and female, are more external in their orientation than those not so identified. Theoretically consistent with this finding (Rotter, 1966, p. 21), Thurber (1976) has reported data indicating that women classified as non-traditional in sex-role orientation show a significantly higher need for achievement than their traditional counterparts. The purpose of the present study was to combine these two results to determine the relationship between achievement motivation and locus of control for a sample of male and female subjects categorized according to Bem and Watson's (1976) newly reconceptualized measures of "masculinity," "femininity," and "androgyny."

Bem's (1974) Sex-role Inventory, Rotter's (1966) Internal-External (I-E) Locus of Control Scale (scored in terms of increasing externality), and Mehrabian's (1969) separate scales for males and females of *n* Achievement were administered to 211 students (130 males and 81 females) enrolled in four sections of a split-level management course at Auburn University. Mean scores for each scale are given by sex in Table 1. As expected, females scored higher on femininity ( $t_{209} = 7.78$ ,  $p < .001$ ) and lower on masculinity than males ( $t_{209} = 5.34$ ,  $p < .001$ ). Males were more internal and scored higher in *n* Achievement. Neither difference, however, was statistically significant.

Following the newly developed scoring procedure for the Bem inventory (Bem & Watson, 1976), all subjects ( $n = 211$ ) were combined into one group (weighted for unequal numbers of males and females) and split into a four-fold classification with respect to the joint distribution of masculinity ( $Mdn = 4.89$ ) and femininity ( $Mdn = 4.86$ ) scores, i.e., masculine (high masculine-low

TABLE 1  
MEANS AND STANDARD DEVIATIONS FOR FIVE MEASURES BY SEX

Measure	Male ( <i>n</i> = 130)		Female ( <i>n</i> = 81)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>n</i> Achievement	32.85	15.11	32.10	11.81	.39	
Locus of Control	10.55	3.99	10.80	3.67	-.47	
Masculinity	5.16	.71	4.62	.70	5.34	<.001
Femininity	4.58	.52	5.15	.52	-7.78	<.001

feminine) *n* = 60; feminine (high feminine-low masculine) *n* = 49; androgynous (high masculine-high feminine) *n* = 54; and undifferentiated (low masculine-low feminine) *n* = 48. A chi-square analysis verified the statistical independence of this assignment of subjects ( $\chi^2 = .10$ ,  $p > .50$ ,  $\lambda = 0.01$ ).

To accomplish the study's intended purpose subjects were further divided by sex (see Table 2). Although a larger proportion of females (58%) than males (49%) was classified as sex-role stereotyped (as being either masculine or feminine), the difference was not significant. Product-moment correlations were computed between Mehrabian scale scores and I-E scores for each of the four subgroups.

TABLE 2  
CORRELATIONS BETWEEN LOCUS OF CONTROL AND *n* ACHIEVEMENT FOR MALES AND FEMALES AS MODERATED BY SEX-ROLE ATTITUDE

Sex	Masculinity		Femininity		Androgyny		Undifferentiated	
	<i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>
Male	.06	50	.33	12	.03	34	-.13	34
Female	.04	10	.01	37	-.54*	20	-.15	14

\* $p < .02$ .

Among females, I-E scores significantly correlated  $-.54$  with *n* Achievement ( $df = 18$ ,  $p < .02$ ) for the androgynous subgroup. This result, indicating a tendency for *n* Achievement to increase as feelings of external control decrease, is consistent with the earlier mentioned work of Minnigerode (1976) and Thurber (1976), as well as with the outcome of related research. Tangri (1972), for instance, has reported data indicating that female "role innovators" are motivated more by internally imposed demands than women designated as "role traditionalists." More recently Burlin (1976) has shown that female "internals" are more likely to aspire to "innovative" occupations than their "external" counterparts.

With respect to the male subgroups, all relationships between locus of control and *n* Achievement were found to be nonreliable. The discrepancy between these results and previous findings (Joe, 1971) is similar to that reported by Wolk and DuCerte (1971). As they note, differences in either testing condi-

tions or sample selection may account for such variation in results. It is also possible that the lack of relationship between the variables may be due to the confounding of separate dimensions with the Rotter I-E scale (Levenson, 1974).

In summary, these findings serve to highlight further difficulties similar to those experienced by previous researchers (cf. Phares, 1976, pp. 110-111). While evidence suggests that androgynous females possess a perspective different from males and other females, further research is needed to clarify the reasons for this distinction.

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