

A DISCRIMINANT ANALYSIS OF PERCEPTIONS OF WOMEN IN A TENURED BUSINESS ROLE

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ABSTRACT

This study explores the effect of long term job holding on stereotypes which are believed to block the advancement of women into male dominated work areas. A mail questionnaire survey produced seven-point semantic differential scale data from 60 male and 51 female respondents in Real Estate sales. Stepwise discriminant analysis was applied to perceptions of salesmen by male and female respondents and perceptions of saleswomen by male and female respondents. No significant differences in perceptions of salesmen by both groups were found. When compared with female respondents, male respondents perceived saleswomen as: a) more emotional, b) more apprehensive, c) having weaker sales technique, and d) more reserved.

INTRODUCTION

Numerous studies concerning the impediments to job advancement by women focus on traditional male attitudes and myths concerning stereotypes which ultimately result in prejudicial action patterns. Research by Athanasiades (1975) supports the contention that women in business suffer from prejudicial stereotyping. Rosen and Jerdee (1974) found that discrimination against women is especially widespread in role supportive tasks such as sales. Epstein (1970) found that women's access to the upper echelons of management are often stymied because protege systems work for males but are inoperative for females. Bass, Kruskal and Alexander (1971) found male respondents' attitudes toward women in management included negative perceptions relating to dependability and career orientation. But we do not know of studies dealing with the central orientation of this paper, the attitudes of males in a job situation where women have a long record of substantial participation. Does familiarity break down traditional stereotypes? Or are traditional stereotypes relatively unaffected by long exposure and observation of performance? The present study attempts to answer these questions.

The long term role of women in real estate is well documented. The first women's professional real estate organization was established in 1924 (Davies, 1963). A U.S. Department of Labor publication indicates that the number of women employed as real estate sales agents and brokers increased from 46,000 in 1960 to 142,000 in 1973 (U.S. Department of Labor, 1975). Even with the aforementioned tenure, sex discrimination in the housing professions, including earnings discrimination, is felt by women to be widespread (Fried, 1977).

In the Real Estate profession, opportunities to observe performance are substantial. The dominant method of compensation is by commission (Boyce, 1969). Fee sharing in return for referrals from other salespersons is customary. The re-

remainder of the fee is often shared with the owner of the agency where the salesperson works. For Sale signs bearing the name of a particular salesperson are supplemented with "sold" attachments that remain as additional advertising. Under commission sharing customs, newspaper and local delivery advertising of other realtors are monitored for new inventory and potential sales. Trade associations promote tours of new homes on the market for groups of sales personnel (May, 1971). The trade associations in most metropolitan areas are active and tend to hold frequent meetings where members interact and compare notes.

METHOD

Unfortunately, a search of the literature reveals no standard instrument for dealing with perceptions of women in a tenured business role. Despite the seeming interest in the topic, there has been no programatic study of the reasons for discrimination against women on an individual industry basis. Therefore, it is not possible to build extensively on prior research and, in fact, this study may represent a beginning step. Previous studies have made use of more voluminous data collection procedures based on the availability of captive audiences of male managers. In the current study, reaching an adequate sample of both sexes required a mail survey. The semantic differential was constructed from procedures set forth in Green and Tull (1975). The bipolar adjectives were selected on the basis of discussions in the literature on sales effectiveness and research dealing with the problems of discrimination encountered by women in management (Orth & Jacobs, 1971; Bass, Kruskal and Alexander, 1971; Mayer & Greenburg, 1964; Webster, 1968). The instrument was a compromise between maximum effectiveness and a reasonable response ratio.

A sample of 250 salespersons (125 male and 125 female) were selected from the four metropolitan areas of Chicago, Atlanta, Oklahoma City and Denver. Only individuals involved in the commercial sale of real estate were considered since this is one of the few industries with heavy participation by saleswomen. A total of 51 women and 60 men returned usable questionnaires as a result of two mailings.

Summaries of respondent characteristics broken down by sex revealed a greater proportion of the males respondents in the "owner" category, suggesting various combinations of sales and development (real estate). In contrast, female respondents ranked themselves higher in sales performance classifications, worked for firms employing more personnel, and tended to contain somewhat fewer owners and more fulltime salespersons. In addition, there were fewer female respondents under 30. On balance, the sample could contain an older top performing group especially among the female respondents. About 54 percent of the female respondents and almost 70 percent of the male respondents worked in offices with ten or fewer salespersons. Thirty-eight of the 60 male respondents worked in offices containing saleswomen.

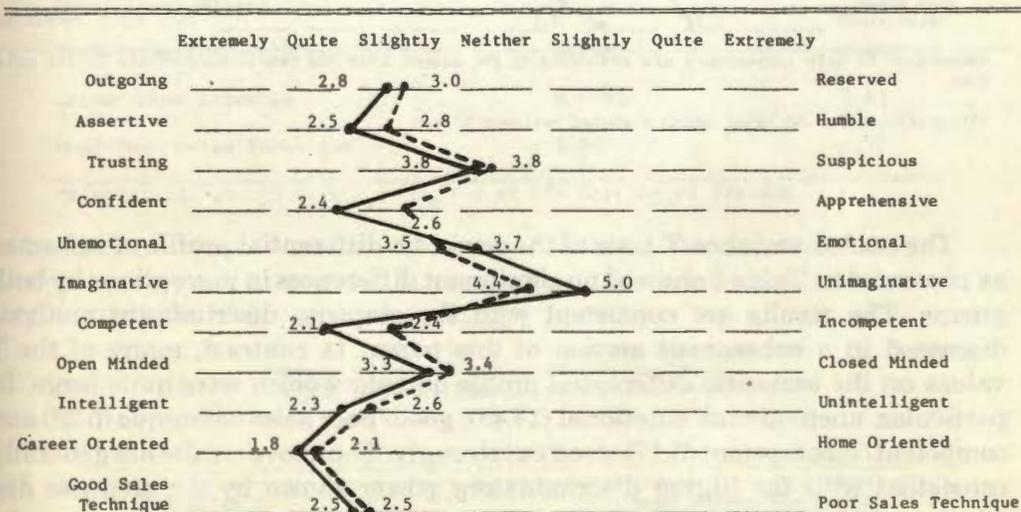
RESULTS

Test of significance between respondent groups for each of the eleven

variables applied to salesmen and saleswomen were first performed using a pooled-variance T test. Examination of the direction of differences in means for the male and female respondent groups provide a basis for the formulation of perceptions of personnel by sex.

There were no significant differences in the T tests of group means between male and female respondents with respect to the 11 variables applied to salesmen, that is, the male and female respondents had very similar perceptions of salesmen. The data in Table 1 illustrates that both respondent groups view salesmen as competent, highly career oriented,* and confident. Both male and female respondents agree that salesmen employ good sales techniques, are quite intelligent, assertive, and outgoing. Rather neutral responses were voiced concerning salesmen on the variables of trustfulness, emotionability and open-mindedness.

TABLE 1
Profile of Salesmen*
(means)

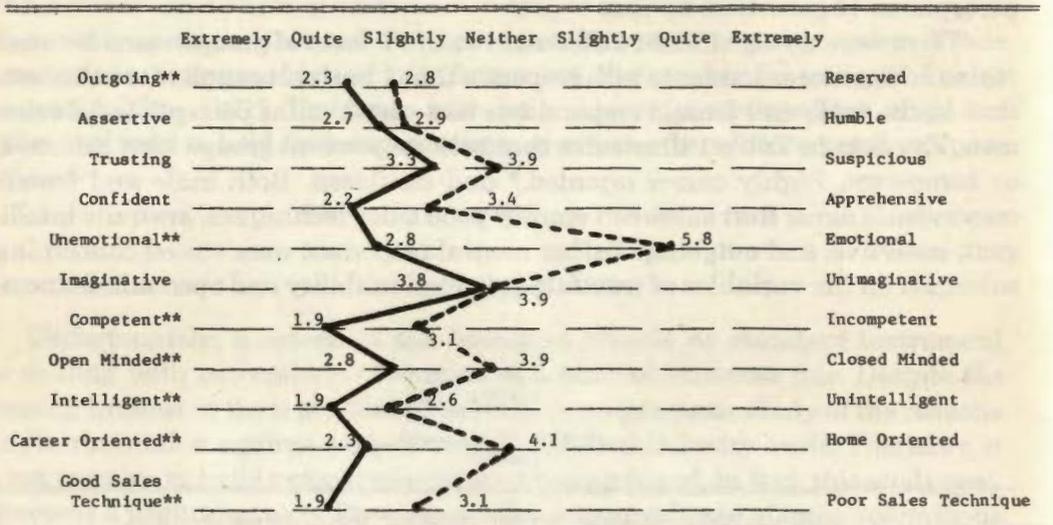


*Responses of male respondents are indicated by the dashed line and female respondents by the solid line. No significant differences were found at .05 using a pooled variance T test.

In contrast, pooled variance T tests applied to male and female respondents scores on the 11 variables relating to roles of women show significant differences for eight of the 11 items shown in Table 2.

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TABLE 2
Profile of Saleswomen*
(means)



*Responses of male respondents are indicated by the dashed line and female respondents by the solid line.

**Significant at .05 level using a pooled variance T test

The pooled variance T tests of the semantic differential profile of salesmen as presented in Table 3 showed no significant differences in perceptions by both groups. The results are consistent with the stepwise discriminant analysis discussed in a subsequent section of this paper. In contrast, many of the T values on the semantic differential profile on saleswomen were quite large. In particular, unemotional/emotional (14.48), good/poor sales technique (5.29) and competent/incompetent (5.17) stood out strongly. The above results are generally consistent with the higher discriminatory power shown by the stepwise discriminant analysis of the semantic differential on saleswomen broken down by sex of respondent.

The use of discriminant analysis to classify objects by a set of independent variables into one of two or more mutually exclusive and exhaustive categories is well known. The results of applying a stepwise discriminant analysis to those eight variables which differed significantly for saleswomen (see Table 3) are reproduced in Table 4. If the discriminant analysis is halted at four steps, the variables which emerge are unemotional/emotional, good/poor sales technique, outgoing/reserved, and confident/apprehensive. The \hat{w}^2 index of discriminatory power (after Tatsuoka, 1970) value suggests that 69 percent of the variation between groups is attributable to group differences.

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TABLE 3

Pooled Variance T Values of Profiles of Salesmen and Saleswomen: 60 Male and 51 Female Respondents

Semantic Differential Variable	Saleswomen	Salesmen
Outgoing/Reserved	2.02*	.61
Assertive/Humble	.95	1.10
Trusting/Suspicious	1.78	.12
Confident/Apprehensive	4.19*	.85
Unemotional/Emotional	14.48*	-.59
Imaginative/Unimaginative	.17	-1.77
Competent/Incompetent	5.17*	1.54
Open/Closed Minded	3.51*	.56
Intelligent/Unintelligent	4.15*	1.48
Career/Home Oriented	6.05*	1.43
Good/Poor Sales Technique	5.29*	-.02

*Significant at .05 with $N_1 + N_2 - 2$ or 109 degrees of freedom.

TABLE 4

Summary of Stepwise Discriminant Analysis Applied to Saleswomen on Four Factors*:**

Variables in Order of Appearance	Mean Scores for Groups	
	Male Respondents	Female Respondents
Unemotional/Emotional	5.75	2.82
Good/Poor Sales Technique	3.10	1.90
Outgoing/Reserved	2.87	2.27
Confident/Apprehensive	3.38	2.21

Classification Matrix

Actual Group	Women	Men	Total
Saleswomen	47	4	51
Salesmen	4	56	60
TOTAL	51	60	111

*Constant Discriminatory Power Index after 5 steps $\eta^2 = .69$

**Ratio after 4 steps = 47.48; significant at .05 level

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Examination of mean scores of the four predictor variables in Tables 4 and 5 provides a descriptive profile of the male and female respondents. While male and female respondents agreed on their perception of salesmen; a much different perception of saleswomen is manifest among the male respondents. The male respondents, when compared to the female respondent, pictured saleswomen as (1) more emotional, (2) possessing poorer sales techniques, (3) being somewhat more reserved and (4) less confident.

TABLE 5

Summary of Stepwise Discriminant Analysis Applied to Salesmen on Four Factors* **

Variables in Order of Appearance	Mean Scores for Groups Male Respondents	Female Respondents
Imaginative/Unimaginative	4.43	4.98
Competent/Incompetent	2.45	2.12
Intelligent/Unintelligent	2.56	2.29
Good/Poor Sales Technique	2.47	2.47

Classification Matrix

Actual Group	Women	Men	Total
Saleswomen	33	18	51
Salesmen	24	36	60
TOTAL	57	54	111

*Discriminatory Power Index after 5 steps $\hat{Q}^2 = .07$

**F Ratio after 4 steps = 1.82; not significant at .05 level

The classification matrix in Table 4 indicates that the discriminant function correctly classified 102 (92 percent) out of a total of 111 respondents.

$$\begin{aligned}
 C_{pro} &= a^2 + (1-a)^2 \\
 &= .54^2 + (.46)^2 \\
 &= .50 \text{ or } 50\%
 \end{aligned}$$

The discriminant function presented in Table 4 classified 47 out of 51 female respondents or 92 percent — an improvement over chance of 42 percentage points; and 56 out of 60 male respondents or 93 percent — an improvement of 43 percentage points over chance.

The results of applying the stepwise discriminant analysis of the semantic differential profiles of both groups to salesmen is presented in Table 5. As anticipated, the discriminatory power is extremely weak. This is consistent with the lack of significant differences in the T tests shown in Table 3. The \hat{w}^2 index of discriminatory power was .07. The evidence suggests that both male and female respondents have a very similar view of salesmen. The stepwise dis-

criminant function of male salespersons classified 36 out of 60 salesmen or 60% — an improvement of only 10 percentage points over chance.

DISCUSSION AND CONCLUSION

The male respondents who were involved in real estate sales felt that saleswomen tended to be more emotional, had a somewhat weaker sales technique, were less outgoing, and more apprehensive. These views, which represent considerable blocks to equal status, appear to be surprising considering that women have been active in real estate for many years, i.e., long enough to expect the traditional stereotypes to break down.

Some light is shed on the problem when the implications of the larger proportion of women in real estate sales operating as employees rather than owners or managers is examined. Bass, Kruskal, and Wallace (1971), have discussed the implications of the situation and we summarize them here. Bass, Kruskal and Wallace (1971) found that the male managers who had the lowest regard for women as workers worked with women subordinates. Research on contact between minority and dominant groups indicates that, in order for a reduction in prejudice to occur between two groups, interaction has to be on an equal basis. (Cited in Bass, Kruskal, and Wallace, 1971). Even when there is peer interaction between men and women, traditional cultural norms could govern the interaction.

The results of this study suggest that the interaction between male owners and managers and saleswomen may produce circular situations where unfavorable attitudes lead to denial of equal opportunities, which in turn foster poor performance. We repeat the suggestion (Bass, Kruskal, and Wallace, 1971) that "changes in attitudes toward women working will occur only when men and women interact as equals so that they can see how their goals and values overlap."

It may be that women prefer sales as opposed to management jobs in real estate. It might be instructive to examine whether this preference actually exists and the reason for it. One hypothesis is that the blocks to equal status found in this study make women reluctant to enter management jobs in real estate. Further research on the attitudes of saleswomen toward management jobs is needed.

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NOTES

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*The authors acknowledge that career/home orientation is no longer considered a relevant variable in sex role research. Career/home orientation assumes no statistical importance in the discriminant analysis reported in a subsequent section of this paper.