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FACTORS AFFECTING CHOICE, SATISFACTION AND SUCCESS IN THE FEMALE SELF-EMPLOYED

The Ohio State University

PH.D. 1982

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FACTORS AFFECTING CHOICE, SATISFACTION AND SUCCESS IN THE FEMALE SELF-EMPLOYED DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By
Frederick Thomas Waddell, B.S., M.B.A., M.A.

*****

The Ohio State University
1982

Reading Committee: S. Osipow, Ph.D.
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Approved By

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ACKNOWLEDGMENTS

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Chapter 1

Introduction

Recent decades have witnessed a steady growth in the importance of women in the labor market. During World War II there was a sharp increase in female participation in the work force; since that time there has been steady growth both in women's share of the labor force and in the variety of work roles assumed by women workers. Between 1950 and 1980, women's share of the labor force has steadily risen from 29.6% to 42.5% (U.S. Department of Labor, 1980). In the same time period, women's share of occupations traditionally held by men has grown steadily. (See Table 1.) Despite these gains, the pay of women workers continues to lag far behind that of men; in 1980, women earned $6 for every $10 earned by men (U.S. Department of Labor, 1980).

A growing number of women have sought to improve their work situation by starting their own businesses. Recently there has been a growing awareness of self-employment as a potential career path for women. This awareness has been reflected in both the popular (Winston, 1979) and academic literature (Demarest, 1977; Flexman, 1980; and Pellegrino, 1979). Furthermore, there has been increasing involvement by the federal government to encourage female business ownership (Nation's Business, 1979).
Table 1

Women Employed in Occupations Traditionally Held by Men

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number (000)</th>
<th>Percentage of All Workers in Occupation</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1950</td>
<td>1979</td>
</tr>
<tr>
<td>Accountant</td>
<td>55</td>
<td>344</td>
</tr>
<tr>
<td>Engineer</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Lawyer/Judge</td>
<td>7</td>
<td>62</td>
</tr>
<tr>
<td>Physician/Osteopath</td>
<td>12</td>
<td>46</td>
</tr>
<tr>
<td>Teacher - College &amp; University</td>
<td>28</td>
<td>172</td>
</tr>
<tr>
<td>Bank Official/Financial Mgr.</td>
<td>13</td>
<td>196</td>
</tr>
<tr>
<td>Buyer/Purchasing Agent</td>
<td>6</td>
<td>136</td>
</tr>
<tr>
<td>Sales Manager/Dept. Head, Retail</td>
<td>35</td>
<td>135</td>
</tr>
<tr>
<td>Sales Representative (incl. Wholesale)</td>
<td>37</td>
<td>162</td>
</tr>
<tr>
<td>Craft</td>
<td>236</td>
<td>737</td>
</tr>
<tr>
<td>Bus Driver</td>
<td>4</td>
<td>163</td>
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<td>Protective Services</td>
<td>11</td>
<td>124</td>
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Note. Adapted from U.S. Department of Labor, 1980.
Demarest (1977) offers evidence that suggests that business ownership or self-employment is potentially a very satisfying and rewarding career choice for women. Unfortunately, however, there has not been much research on female self-employment. Most of the research on business ownership has focused on males exclusively. In those studies which left sex unspecified, samples were nearly all male (Demarest, 1977).

The research of Demarest (1977), Flexman (1980) and Pellegrino (1979) has helped to remedy somewhat the severe shortage of research on female self-employment. Demarest's (1977) study focused on women business owners and self-employed professionals in the Boulder, Colorado area. In her study she gathered data on a large number of psychological, sociological, and financial variables pertinent to owners and their enterprises. In Flexman's (1980) study, women owners were asked to report success and failure incidents from their ownership experiences and to evaluate the success and failure experiences in terms of agency, communion (Bakan, 1966) and causal attribution. A questionnaire was developed to obtain scores on the constructs of agency and communion and on several categories of causal attribution. Correlations between the variables were obtained and inferences about relationships between variables were made. In Pellegrino's (1979) study, women owners of retail and service firms in the Roanoke, Virginia area were interviewed and information was obtained on:

(1) Formative problems encountered by the owners;

(2) Operational problems encountered by the owners;
(3) Formative and/or operational problems which owners attributed to gender;

(4) Changes the owners would make if they started business over again;

(5) Advice women owners would offer to other women planning to open a business;

(6) Educational programs pursued by women owners; and

(7) Educational program needs of women owners.

Demarest’s (1977) and Flexman’s (1980) studies focused exclusively on women owners and did not attempt to compare women owners with women in any other occupational categories. It would be helpful to have such comparisons; in addition to having theoretical value, such comparisons might assist in an individual’s exploration of career alternatives. Consequently, the present study has made some comparisons between women business owners and two other groups of women, managers and secretaries. (Pellegrino did not compare his sample of owners to other occupational groups; however, most of the research questions of his study were not applicable to other occupations.)

None of the studies on women owners attempted to develop any predictor variables that might explain the success or satisfaction of women business owners. Knowledge of predictor variables for success and satisfaction in female self-employment, in addition to having theoretical value, might assist those who are considering entering self-employment. The present study has attempted to develop such predictor variables.
In the interests of limiting the scope of inquiry, the emphasis in this study is on psychological rather than sociological or financial variables. The study explores three major concerns:

1. Is there a self-employed personality profile (set of personality characteristics) for female business owners? If so, what are the key variables in the profile?
2. If there are important variables that define the female self-employment personality, do these variables predict satisfaction and success in enterprise?
3. If an individual female fits the psychological profile for ownership, will she experience job dissatisfaction if she is not self-employed but rather working as an employee?

Comparison of Groups

In order to explore the idea that there is a psychological profile associated with self-employment, three groups of women will be compared on several psychological variables. There are an infinite number of variables that could be used to describe an individual; however, in this study the only variables included will be those that have shown some promise of explanatory power based on past research on business ownership. The specific variables used in this study are:

1. Achievement motivation;
2. Locus of control;
3. Sex-role "masculinity;"
Presence of enterprising models.

Which groups to include in any comparison is a second question that must be addressed. In this study a group of women managers was included because there has been considerable debate on whether managers and business owners are distinct personality types (Gannon, 1979). In contrast to those who feel there are definite psychological differences between managers and owners, there are those who feel that the only differences between the two groups are chance external events and not internal dispositions (Gannon, 1979). Thus, inclusion of such a group may shed some light on this much-discussed issue. It was also decided to include a group of secretaries in the study. According to the U.S. Department of Labor (1978), there were 3.5 million persons employed as secretaries in 1976, and employment prospects for the future are very favorable. Since this occupation is and probably will continue to be such an important source of female employment, it seemed appropriate to use it as a comparison group.

Success and Satisfaction

If there is a psychological profile for the self-employed, a set of variables which distinguishes them from other groups of people, it would be desirable to find out if these variables are related to success and satisfaction in self-employment. Knowledge of such relationships could have implications for counseling, both for diagnosis and treatment. For example, high scores on certain variables could alert the counselor to discuss the self-employment option, just as high scores on an interest inventory suggest
discussion of certain occupations. Furthermore, if a client had already expressed an interest in self-employment, the counselor would have a framework for evaluating the realism of this interest and providing treatment that is appropriate to this goal.

There are many ways to conceptualize and measure success in an occupation (Crites, 1969). Success can be valued from an internal or phenomenological viewpoint, or, just as reasonably, from an external or objective perspective. The concept can be broken down into finer detail. For example, the external perspective could be considered from the employer's viewpoint, from society's viewpoint, or from some other external stance.

For this study, the length of time in business was chosen as a measure of success. The assumption here is that small businesses have a high failure rate, and that the surviving owners will, on the average, be more capable than the new owners.

The Brophy (1959) scale was used to measure job satisfaction. There are other means of measuring this concept. However, the Brophy scale had adequate reliability and validity, and took little time to complete.

Satisfaction and Closeness of Fit

Each owner, manager, and secretary has a "profile" consisting of six values of six psychological variables. Each profile, then, can be imagined as a point in six-dimensional space. For each of the three occupations, there will be a group or cluster of profiles which have similar values on the six variables. However, there will also be a few profiles that more closely resemble the
profiles of either of the other two occupations. It was hypothesized that women secretaries and managers who do not fit the typical profile for their own occupation, but rather fit that of business owners, will have lower job satisfaction than those secretaries and managers who fit the typical profiles for their own occupations. Discriminant analysis (Tatsuoka, 1971) is used to identify secretaries and managers with owner-type profiles; then a simple t-test is used to compare the job satisfaction of secretaries who fit the secretarial profile to the satisfaction of secretaries who fit the owner profile. The same steps in analysis are taken for managers.
Chapter 2

Literature Review

In the first part of this chapter, the research on female business ownership is reviewed. Since only three studies were located, they are reviewed individually. Next, some key variables that are apparently related to entrepreneurship are discussed. These variables have appeared in the literature on male and female business ownership, and there is some evidence that the variables are related to entrepreneurial activity. Finally, the relationship of the existing literature to the present study is delineated, and the chapter summarized.

Female Business Owners

In the academic literature, there have been three major pieces of work dealing specifically with self-employed women, the doctoral dissertations by Demarest (1977), Flexman (1980), and Pellegrino (1979).

Demarest's (1977) study surveyed 51 women business owners and self-employed professionals in the Boulder, Colorado area. In her study she gathered data on psychological, sociological, and financial variables pertinent to the owners and their enterprises.

Some of the more interesting findings were that:

(1) Eighty-five percent of the women had come from families
in which one or both parents had owned a business;
(2) There were no major approaches to business practices which could be attributed to the fact that the operators were women;
(3) Most women expressed pro-feminist views and had experienced sex-discrimination, but had developed individual strategies for dealing with discrimination and were not actively involved in the women's movement;
(4) Most women reported stable life patterns and were happy with their personal lives and relations. Two-thirds had children;
(5) Nearly all women enjoyed "being their own boss" and would not want to work for someone else again except under exceptional circumstances;
(6) Sixty percent of the women earned under $10,000 per year from their enterprises and nearly half supplemented their income from other sources;
(7) In general, the women did not experience a loss of femininity from operating their own businesses.

In summarizing her findings, she emphasized that her study was an exploratory pilot study, and that much work remained to be done. She specifically suggested more work in the following areas:
(1) Generalizability. There was some doubt that women in the Boulder area were representative of women in smaller cities, larger cities, or cities in other parts of the United States.
(2) Behavioral and observational measures. Demarest's (1977) study was based on self-report data, and she urged that later studies include more behavioral and observational data.

(3) Comparison groups. Demarest's (1977) study was limited to the Boulder sample of self-employed women. She suggested that later studies include comparison groups such as women managers or male entrepreneurs.

(4) Longitudinal and predictive studies. Demarest's (1977) study was cross-sectional and descriptive in nature. She recommended more research to develop hypotheses concerning success and failure of women's enterprises, and more studies that focus on the development of women and their enterprises over time.

In Flexman's (1980) study, business-related incidents of success and failure, as reported by women business owners, were examined from two perspectives:

(1) Bakan's (1966) constructs of agency and communion; and
(2) Attribution theory.

Each woman was asked to describe three success incidents and three failure incidents and to answer questions about the incidents. Answers to the questions were scorable on the dimensions of agency, communion, as well as on eleven causes to which the incidents might be attributable. An analysis of the content of the success and failure incidents resulted in 20 categories of incidents.

For success incidents, mean agency and communion scores were
approximately equal. For failure incidents, agency scores exceeded communion scores. Evidently the respondents, in interpreting their success experiences, considered both goal attainment and interpersonal relationships as important aspects of the definition of success. However, for failure incidents, they appeared to emphasize goal attainment as the major criterion of success.

There was a positive correlation in the .20 - .30 range between composite agency and composite communion scores. Thus it appeared that the two constructs, while separate, were not dichotomous.

For success incidents, causal attributions obtaining high mean scores were effort, ability, and information or experience, confidence, and intelligence. For success incidents, causal attributions obtaining low mean scores were accident, powerful people, and ease of task. For failure incidents, attributions obtaining high scores were information or experience, powerful people, and others' help. For failure incidents, attributions obtaining low scores were religious faith, accident, who you know, and lack of intelligence.

Flexman (1980) concluded by suggesting some directions for future research and some educational applications of the findings. She suggested that further studies will need to pay attention to communal aspects of entrepreneurship and the relationship between agency and communion in entrepreneurs. She suggested that career educators may need to revise the stereotypes of the entrepreneur in light of the communal aspects of entrepreneurship that emerged in Flexman's (1980) study. In Flexman's (1980) study, the presence
of parental models of self-employment seemed related to the respondents' choice of self-employment. Flexman (1980) suggested that career educators take some steps to see whether there are experiences which would be equivalent to the presence of parental models which could be made available to women who do not have self-employed parents. Such experiences might enhance students' awareness of the self-employment option in career choice.

In Pellegrino's (1979) study, twenty female owners of retail and service firms were interviewed and were asked to respond to questions covering the following areas:

1. Problems encountered in forming the businesses;
2. Problems encountered in operating the businesses;
3. Formative and/or operational problems in the businesses which were attributed to gender;
4. Changes which the owners would implement if starting their businesses over again;
5. Advice for other women planning to open retail or service firms;
6. Educational programs pursued by owners; and
7. Future educational program needs of owners.

The owners, whose firms were located in the Roanoke, Virginia Standard Metropolitan Statistical Area, were contacted after being randomly selected from a list of potential respondents. Questions in the survey were both open and closed-ended. Content analysis was used to analyze responses to the open-ended questions.
Study of the results indicated that there were no formative problems that were considered "major" or "critical" by a majority of owners. The most frequently mentioned formative problems were:

1. Choosing an affordable and accessible business site;
2. Obtaining funds to start the business;
3. Obtaining specific information to plan and start the business; and
4. Determining potential sales volume.

A majority of the owners considered cash-flow planning and controlling expenses to be major or critical problems in the operational phase of their businesses. No other operational problems were considered to be major or critical by a majority of owners. Some of the more frequently mentioned operational problems were:

1. Hiring capable people to fill positions; and
2. Scheduling time to plan day-to-day operations.

Among formative and/or operational problems attributed to sex of owner, none were considered a problem by a majority of owners. The most frequently mentioned were:

1. Obtaining funds to start and operate the business; and
2. Not being taken seriously as a business person.

The owners were asked what they would do differently if they were to start their businesses over again. The most frequently mentioned desire was for more capital to start the business.

The owners were also asked what advice they would give to prospective female business owners. There were many different answers to this question, but the most frequently encountered
were:

(1) Be willing to devote time to the business;
(2) Solicit husband's moral support;
(3) Start with an idea and pursue it;
(4) Be committed to the business; and
(5) Be knowledgeable in the business.

Women owners were asked to name educational programs in which they had participated in the past year. The majority of owners had not participated in any educational programs. The most frequently mentioned programs among those who did participate were programs of the Small Business Administration and miscellaneous programs presented by manufacturers.

Owners were asked about additional needs for educational programs. A large majority desired further education. About half of the owners surveyed desired further education in bookkeeping/accounting. A smaller number of owners desired education in business management, other business topics, and law. Pellegrino (1979) concluded by presenting recommendations for new programs and research suggested by his own study. He recommended that educational institutions provide courses, seminars and workshops on starting and managing small businesses as well as offerings on bookkeeping and accounting for business owners. He also recommended that experienced female owners be enlisted to assist in management assistance programs; the experienced owners could provide much valuable advice and information based on their experiences.
Several women owners had experienced difficulty in obtaining funds to start and operate their firms, and some perceived that they were not taken seriously as business owners. Pellegrino (1979) suggested sensitization programs for employees of lending institutions and management assistance agencies in order to enhance their awareness of female business ownership.

Pellegrino (1979) suggested new research to extend his study to other geographical locations, other types of firms, and to male business owners. He also recommended that existing management assistance and educational resources for women owners be thoroughly assessed, and future needs determined.

The studies discussed so far have focused exclusively on female business ownership. Since the present study is concerned with women's business ownership, it seemed very appropriate to include a thorough discussion of these studies. It was decided, however, that three studies were not an adequate number on which to base the hypotheses of the present study. Consequently, the base of literature was expanded to include studies of business owners in which the owners were all males or the sex was unspecified. By inclusion of studies involving male entrepreneurs, the literature base was expanded considerably. The enlarged body of literature was examined and a number of variables were selected for closer scrutiny. In the following sections, the selected variables are individually reviewed, and hypotheses relating these variables to entrepreneurship are developed.
Achievement Motivation

McClelland, Atkinson, Clark and Lowell (1976) developed a theory of motivation which has had wide application in the literature on entrepreneurship. In their theory all motivation is learned. In their model, motives are born when cues, external and internal, become associated with changes in affect, either positive or negative. If, on some future occasion, the person experiences some of the original cues, there will be a fractional reactivation of the previous emotional state. According to McClelland and associates (1976), this fractional reactivation is motivating to instrumental activities which will either approach (for positive emotional states) or avoid (for negative emotional states) situations similar to the one which produced the original affective change. In connection with their theory of motivation, McClelland and associates (1976) developed fantasy-based measures of motivation.

Although McClelland and associates' theory of motivation was not restricted to any particular motives, the achievement motive has received heavy emphasis in the research which has grown out of McClelland and associates' theory of motivation. On a macroscopic level, McClelland (1961) has found relationships between achievement motivation and the economic growth of nations. On a more microscopic level, he has found relationships between achievement motivation and the entrepreneurial activity of individuals.

McClelland (1961) hypothesized a relationship between entrepreneurship and achievement motivation because of the role behaviors
required of entrepreneurs. McClelland (1961), based on his interpretation of the literature on entrepreneurship, stated that the following role-behaviors were required of entrepreneurs:

1. Decision-making in activities requiring skill with moderate risk of failure;
2. Innovative activity;
3. Individual responsibility;
4. Knowledge of results of actions;
5. Anticipation of future possibilities; and
6. Organizational skills.

In reviewing the literature on achievement motivation, McClelland (1961) found that most of these role-behaviors (the first five) were related in some fashion to achievement motivation. In comparing those high and low in achievement motivation, McClelland (1961) found that those high in achievement motivation:

1. Exhibited a stronger preference for activities involving the first five role-behaviors; or
2. Performed better in situations involving the first five role-behaviors

Consequently, McClelland (1961) hypothesized that persons high in achievement motivation would prefer entrepreneurial activities. McClelland (1961) predicted that those high in achievement motivation would tend to become involved in business ownership and managerial occupations; these occupations would provide ample opportunities for the preferred entrepreneurial activities.
McClelland (1961) has extensively investigated the relationship between achievement motivation and business ownership/management performance. Using a fantasy-based measure, he found that:

(1) U.S. and Italian managers had significantly greater achievement motivation than professionals in the respective countries (p = .025);

(2) Managers at General Electric Corporation (U.S.) had significantly greater achievement motivation than staff specialists of equal position level (p = .025);

(3) Successful managers in Turkey had significantly greater achievement motivation than less-successful managers (p = .01);

(4) Managers in Poland (state ownership) had significantly greater achievement motivation than professionals in the same country (p = .10);

(5) There was little difference in achievement motivation between managers and owner-operators;

(6) Managers in sales and marketing had significantly greater achievement motivation than managers in other areas (p = .02);

(7) Managers in middle salary levels had significantly greater achievement motivation than managers in the top and bottom salary levels (p = .02); and

(8) In Poland and Italy, managers who supervise larger numbers of people have higher achievement motivation than managers who supervise fewer people (p = .10).
Singh (1976a) studied agricultural entrepreneurs in India; he compared the increase in crop productivity of those who were high in achievement motivation with output increase of those low in achievement motivation. The comparison involved only the top and bottom 5% in achievement motivation, as measured by the fantasy-based instrument. He found that the farmers high on achievement motivation significantly outperformed those low in achievement motivation. However, in a separate study of Indian farmers, Singh (1978b) found no relationship between growth in crop yields and scores on a fantasy-based measure of achievement motivation.

Nandy (1973) studied a diverse group of entrepreneurs in India and found a significant relationship between entry into entrepreneurship and scores on a fantasy-based measure of achievement motivation. However, the achievement motivation scores were not found to be related to rated entrepreneurial competence. In a fourth study carried out in India, Hundal (1971) compared the exponential growth rates of industrial firms in Punjab. It was found that owners of "fast-progressing" firms had higher achievement motivation than owners of "slow-progressing" firms (p < .01). A projective sentence-completion test was used to measure achievement motivation.

Meyer, Walker and Litwin (1961) compared "entrepreneurial" managers to staff specialists in the same company. The managers in the study were classified as entrepreneurial because in their jobs:

(1) They had heavy individual responsibilities;

(2) Objective feedback was available; and
(3) There were observable risks of wrong decisions. Participants were matched on age, education, salary or status, and years of company service. Using a fantasy-based measure of achievement motivation, the managers were found to exhibit significantly more achievement motivation than the staff specialists \((p < .025)\).

Wainer and Rubin (1969) studied the sales growth rates of new, small, technically-based enterprises. The firms, all 4-10 years old, were "spin-offs" of research laboratories at Massachusetts Institute of Technology and a few other nearby institutions. The average firm owner was 36 years old and possessed a masters' degree. Using projective measures, the achievement motivation of each owner was assessed and classified as "high," "moderate," or "low." The firms of owners with "high" achievement motivation tended to have significantly higher sales growth rates than the firms whose owners had "moderate" \((p < .0001)\) or "low" \((p < .006)\) achievement motivation.

All of the above results concerned males in ownership and managerial positions. Comparable studies of females do not seem to have been attempted. There are probably many reasons for this. One reason may be that the projective measures used above are not correlated with achievement effort or performance for females (Entwisle, 1972).

Projective measures of achievement motivation have also been criticized for low reliability (Entwisle, 1972). Doubts about the reliability, which averages in the .30 - .40 area (Entwisle, 1972), have led to doubts about the validity of the instruments. Because
of doubts about the validity of projective measures of achievement motivation, questionnaire measures have been developed.

Ray (1980) presents evidence that Likert-scale achievement measures are superior to projective measures. He also provides a factor analysis of achievement questionnaires that suggests there may be two or three major factors involved in achievement motivation.

Helmreich, Beane, Lucker and Spence (1978) developed a multidimensional measure of achievement motivation, the Work and Family Orientation Questionnaire. They studied the relationship between the productivity of scientists as measured by the number of citations and scores on the components of the Work and Family Orientation Questionnaire. No significant relationship was found between individual components and the number of citations. However, there were significant interactions between the components.

Lynn (1969) has also developed a questionnaire measure of achievement motivation. Using this questionnaire measure, Lynn (1969) compared four groups of participants in England:

(1) Entrepreneurs;
(2) University professors;
(3) Senior managers; and
(4) Naval officers.

(It should be noted that in England, a "professor" is equivalent to a full professor in the United States.) The entrepreneurs were significantly higher in achievement motivation than all the other groups (p < .05). The senior managers were second to the entrepreneurs in achievement motivation.
Using Lynn's (1969) questionnaire, Hines (1973) compared the achievement motivation of four groups of participants in New Zealand:

(1) Entrepreneurs;
(2) Engineers;
(3) Accountants; and
(4) Middle Managers.

The entrepreneurs were found to have significantly higher achievement motivation than all other groups ($p < .01$). Next-highest in achievement motivation was the group of engineers.

Borland (1975) investigated business students' desires and expectancies regarding future business ownership. She found that students with a "high" expectancy of starting a business were significantly higher in achievement motivation than those students with "low" or "moderate" expectancy ($p < .01$). Students' desire to start a business was not significantly related to achievement motivation. Lynn's (1969) questionnaire was used to measure achievement motivation.

Objective measures of achievement motivation are relatively new and no one instrument has emerged as clearly superior to the rest. More research is needed to refine and develop the questionnaire measures.

**Locus of Control**

Locus of control is a concept that has frequently been studied in connection with business ownership, and usually some relationship has been found between locus of control and choice of
self-employment. The concept of locus of control is considered to be a development in social learning theory (Rotter, 1966). In social learning theory, the reinforcement of a behavior strengthens the expectation that the same behavior will be followed by that reinforcement in the future. Once an expectation of reinforcement is developed, failure of the reinforcement to occur results in reduction or extinction of the expectation. Rotter (1966) contends that there are stable individual differences in individuals' generalized expectancies about the causes of their reinforcements. Some individuals tend to believe that their reinforcements are controlled by their own actions; these individuals, according to Rotter (1966), are manifesting "internal" locus of control. Other individuals tend to believe that their reinforcements are controlled by external factors such as luck, fate, or powerful others; Rotter (1966) considers these individuals to be manifesting "external" locus of control. Rotter (1966) suggests that a person's locus of control orientation is learned and dependent on the person's history of reinforcements. Rotter (1966) contends that an individual's locus of control orientation influences his/her behaviors across a broad range of situations. Rotter (1966) cautions, however, that a person's behavior is influenced not only by generalized expectancies but also by specific expectancies and values. For example, a person might be expected to enter a poetry contest based on the person's very internal locus of control orientation. In reality the person might not enter the contest because he/she feels a specific lack of ability in writing.
Poetry or does not value the prize being offered for winning the contest. Provided that these limitations are recognized, Rotter (1966) suggests that the locus of control concept has important explanatory value in predicting human behavior. He has developed a questionnaire measure of locus of control, the Internal-External Control Scale (Rotter, 1966).

There appears to be some relationship between locus of control orientation and choice of self-employment. The research evidence suggests that business owners are "internal" compared to other classes of people.

Borland (1975) investigated the desires and expectations of business school students in regard to future business ownership. The students were male undergraduate and graduate students in the College of Business at the University of Texas at Austin. All participants were asked to complete Levenson's (1973) locus of control scale. Levenson's (1973) scale provides measurements of locus of control on three dimensions:

1. Internal, which assesses a person's belief in self-control of personal outcomes;
2. Powerful Others, which assesses the belief that one's life is controlled by powerful others; and
3. Chance, which assesses the belief that one's life is controlled by luck, chance or fate.

Levenson (1973) developed these scales through factor analytic studies of the locus of control concept.
In Borland's (1975) study, the students were asked to estimate, on a 7-point scale, their expectancies of starting a business within three years of leaving school. On the basis of their responses, individuals were classified as having "high," "moderate" or "low" expectancies of starting a business within three years of leaving school. In comparing the three classes of students, it was found that there were significant differences in Locus of Control - Internal (p < .03) and Powerful Others (p < .03). The difference in Locus of Control - Chance approached significance (p < .07).

Students were requested to assess, using a 7-point scale, their expectancies of starting a business some time after leaving school (not necessarily within three years). On the basis of their responses, students were classified as having "high," "moderate" or "low" expectancies of starting a business sometime. In comparing the three classes of students, it was found that there were significant differences in Locus of Control - Internal (p < .01). Differences on the other two locus of control scales were not significant.

Students were asked to assess, on a 7-point scale, their desire to start a company sometime after they leave school. On the basis of their responses, students were classified as having "high," "moderate" or "low" desire to start a company. In comparing these three classes of students, it was found that there were significant differences in Locus of Control - Internal (p < .02) and Powerful Others (p < .02). The difference in
Locus of Control - Chance approached significance \((p < .08)\).

Stewart (1977) summarized 10 studies of owners (1975-1977) and found that the average locus of control (Rotter, 1966, scale) of the owners was 5.73. This compares to the average score of the general public which is between 8 and 9 (Rotter, 1966). On Rotter’s (1966) scale, high numbers indicate externality. Thus, Stewart’s (1977) findings suggest that business owners tend to have an internal locus of control orientation. Significance levels for the differences, however, were not reported.

In her study of women business owners, Demarest (1977) measured the locus of control of her sample using the Levenson (1972) three-dimensional locus of control measure. Demarest (1977) found that her sample was more internal than the Levenson (1972) norm group on all three locus of control dimensions. Significance levels for the differences were not reported.

Pandey and Tewary (1979) investigated variables that contributed to rated entrepreneurial competence among applicants to the technical committee of a financial corporation in India. Results indicated that selected applicants (high rated competence) were significantly more internal than rejected applicants (low rated competence) \((p < .05)\). Rotter’s (1966) scale was used to measure locus of control orientation.

In summary, it appears that locus of control has explanatory value in distinguishing the self-employed from other groups of people along one dimension. Of course, there are other factors that contribute to the choice of self-employment, such as
Most of the accumulated research on locus of control has utilized Rotter's (1966) scale, which provides a single-score measure of locus of control. Loo (1979) cites some studies suggesting the multi-factorial nature of locus of control and urges researchers to use component scores in addition to the overall measure. Mirels (1970), for example, performed a factor analysis on Rotter's (1966) scale and discovered two major factors. The first factor concerned the amount of control a person believes he/she personally possesses over events. The second factor concerned the amount of control a citizen in general can exert over political and world affairs. In another factor analytic study, Levenson (1972) performed a factor analysis of her own scale and found three major factors:

(1) Internal, which measures the degree to which a person believes he/she has control over his/her own life;
(2) Powerful Others, which measures the degree to which one believes powerful others control his/her life; and
(3) Chance, the degree to which one believes luck, chance or fate control one's life.

In defence, Rotter (1975) has pointed out that the original validation data on the Rotter (1966) scale suggested the presence of only one major factor.

Loo (1979) has also urged researchers to be wary of contamination of locus of control by the social desirability factor.

Rotter (1975), however, has indicated that early studies of the
Rotter (1966) scale indicated only a small contamination by the social desirability variable.

**Sex-Role**

On theoretical grounds, the work of Bem (1974) on sex-roles may have great relevance to the study of female business ownership. Bem (1974) hypothesized that there are stereotypic sex-roles in all societies and that these sex-roles restrict behavior along certain channels. Bem (1974) suggested that sex-role identity be measured along two independent dimensions, the "masculine" and the "feminine." The "masculine" dimension consists of those traits that a society stereotypically considers to be positive in males of that society. The "feminine" dimension consists of those traits that a society stereotypically considers to be positive in females of that society. Bem (1974) hypothesized that individuals, whether male or female, may be low or high on both dimensions. She also hypothesized that individuals who are low on either dimension will experience some substantial restriction of behavior. Persons who are low on the "masculine" dimension (possess few of the traits the society typically considers masculine) were predicted to experience distaste for instrumental activities and to avoid such activities. Persons who are low on the "feminine" dimension were predicted to experience distaste for expressive or nurturant activities and to avoid such activities. Research by Bem (1975) and Bem and Lenney (1976) supported the predicted restrictions in behavior.

Since entrepreneurial behavior is very instrumental in nature, it is possible that Bem's "masculine" dimension might be related to a
person's:
(1) Choice of a career in business ownership;
(2) Successful performance of the duties involved in business ownership; and
(3) Satisfaction with entrepreneurial work.

Demarest (1977), in her study of women business owners, surveyed the work attitudes of the women owners. Demarest (1977) did not administer a sex-role inventory to her sample of female business owners. However, based on her interview data, she speculated that her sample of owners had a strong stereotyped "masculine" component in their personalities. She judged this to be so because her owners usually attributed their success to the fact that they were "ambitious, aggressive, self-reliant, independent, competitive, made decisions easily, exercised authority, accepted leadership, took risks, were willing to stand by their convictions and analyzed relevant factors well (Demarest, 1977)."

If Demarest (1977) is correct in her speculation, the "masculine" scale of the Bem (1974) Sex-Role Inventory might be significantly related to choice of self-employment and success and satisfaction in that endeavor. High scores on this scale would indicate an instrumental orientation, which would enhance functioning in operating a business.

Models

The social learning theory of career decision-making (Krumholtz, Mitchell, and Jones, 1976) suggests that models play an important role in career decision-making.
Learning experiences also occur when the individual's prevailing response pattern is a reaction to external stimuli. Observational learning in which the individual learns by observing real or fictitious models is included in this category of experiences (Krumboltz, Mitchell & Jones, 1976).

Based on this theory, it seems reasonable to expect that the choice of a self-employed career would be influenced by the presence of models. There is indeed evidence that supports such a relationship.

The most prevalent and prominent credible example is provided by one's father or mother. In studies of company formations in a variety of industries and locations in the United States, the percentage of company farmers found to have fathers/mothers who were independent (company owners, free professionals, independent artisans or farmers) ranges between 50-58%. This compares with a census count of less than 12% of the U.S. population listed as self-employed. In the Northern Italian study, the percentage of entrepreneurs with independent parents was 56%. In Carroll's study of the Filipino entrepreneurs, the percentage was 74%, in Marris and Somerset's study of Kenyan entrepreneurs, 80%, and in Harris's study of Nigerian entrepreneurs almost 89%. Borland found that the variable most positively associated with a business student's declared expectation or desire to start a company was whether the student's father had ever started a company (Shapero, 1979).

There is some evidence that non-parental models are also influential in company formation. However, in this case the evidence is somewhat indirect and rather small in amount. Shapero (1979) cites cross-cultural differences in rates of company formation as evidence that nascent owners are responding to differing intensities of model stimuli in different cultures. In Cooper's (1971) study of technical entrepreneurship, he found that small companies spin-off more company formations than large ones. It is inferred that the head of a small company is a more accessible model for a potential entrepreneur than the head of a large company. Of course, there are other reasonable explanations why small companies generate
more company formations than large companies.

Summary and Implications of Literature for Present Study

The number of studies pertaining to male entrepreneurs greatly exceeds the number pertaining to females. However, three studies have focused exclusively on female business owners.

Demarest (1977) surveyed women owners in the Boulder, Colorado area. She found that the owners tended to come from families in which one or both parents had owned a business. Her sample of owners reported a high level of satisfaction with their personal lives and two-thirds had children. The owners did not appear to experience any loss of femininity because of business ownership. The owners stated that they enjoyed their careers and very few would willingly return to employee status. The owners experienced this high level of career satisfaction in spite of financial rewards that were not outstanding; sixty percent of the women earned less than $10,000 per year from their enterprises. The fact that the owners were female did not appear to materially affect the way they operated their businesses. However, the owners reported that they had experienced some discrimination because of their sex.

Flexman (1980) investigated the reported success and failure incidents of women owners and uncovered:

1. The causal attributions owners made about their successes and failures; and

2. The meanings owners imputed to their successes or failures along Bakan's (1966) agency and communion dimensions.

In considering causal attribution, the owners tended to attribute
the success incidents to effort, ability, information or experience, confidence and intelligence. The owners tended to attribute their failure incidents to information or experience, powerful people, and others’ help. In imputing meaning to their successes and failures, owners tended to treat successes somewhat differently from failures. For successes, owners tended to impute agentic and communal meanings about equally. For failures, agentic meanings were emphasized over communal. Evidently both goal attainment and interpersonal relationships were important aspects of success for the owners. However, the importance of interpersonal relationships was somewhat deemphasized for failure incidents.

Pellegrino (1979) surveyed the formative and operational problems of women owners in the Roanoke, Virginia area. He also inquired about their educational experiences and future educational needs. He also asked the owners what they would do differently if they were to start their business over again, and what advice they would give to prospective owners. There were no serious formative problems mentioned by a majority of owners. A majority of owners did mention two serious operational problems, cash-flow planning and controlling expenses. Concerning educational experiences, most owners said they had not participated in any educational programs within the last year. However, the great majority of the owners felt they needed more education, and half of the owners surveyed desired more training in bookkeeping and accounting. There was no consensus on what the owners would do differently if starting over again in business. However, the most frequently
mentioned change was an increase in capital to start the business. Owners gave a wide variety of answers when asked what advice they would give to prospective owners. The most frequently encountered replies urged new owners to know their businesses, be committed to them, and enlist the moral support of their spouses.

The preceding studies on women owners offer valuable information on the women owners and their firms. However, a wider base of research is needed in order to pursue the purpose of this study, which is to determine the personal characteristics of women that are related to choice, satisfaction, and success in business ownership. When the research base is expanded to include studies of male owners, several variables emerge that appear to have value in predicting choice, success and satisfaction in female business ownership.

McClelland's (1961) investigations suggest the potential of achievement motivation as a predictor of entrepreneurial behavior. Several investigators have offered support for McClelland's (1961) findings and some have used objective measures of achievement motivation such as Lynn's (1969) questionnaire.

The locus of control concept (Rotter, 1966) has been utilized in several studies of business ownership, and in a few cases (Borland, 1975; Pandey and Tewary, 1979) significant relationships between internality and entrepreneurial interest or potential have been found.

The relationship of sex-role variables to entrepreneurship has not yet been demonstrated because it has not been investigated.
However, on theoretical grounds a relationship is expected to be found.

The influence of enterprising models on entrepreneurial behavior has received some support (Shapero, 1979; Borland, 1975), primarily for the influence of parental models. However, more research is needed to confirm the preliminary findings.

To summarize, consideration of an expanded literature base suggests the hypothesis that several variables are positively related to entrepreneurship (choice, satisfaction and success):

1. Achievement motivation;
2. Locus of control internality;
3. Sex-role "masculinity;" and
4. Presence of enterprising models.

If the above hypothesis is confirmed, there is the implication that entrepreneurs have a characteristic "cluster" of scores on the psychological variables under consideration (i.e., high scores on achievement motivation, internality, "masculinity," and models for ownership. Owners who are congruent with this typical cluster are expected to have higher job satisfaction, in general, than those owners whose scores are atypical. This line of thinking could be extended to non-owners, to form an additional hypothesis: Those non-owners whose scores more closely resemble those of owners than those of their own occupational groups are hypothesized to experience less job satisfaction than non-owners whose scores are congruent with those of their own actual group. This hypothesis will be checked for the managers and secretaries in the present
study. The hypothesis will be presented in more detail in Chapter 3.
Chapter 3

Method

Subjects

Subjects for the study were volunteers recruited from the ranks of women's organizations. Women's networking groups and groups limited to designated occupations (e.g., secretaries) were solicited for help in locating volunteers.

Self-employed women met certain criteria to be included in the study. They had to be involved in the market economy; that is, the exchange of goods and/or services for money. All sole proprietors were eligible. However, if the woman was in a partnership, 50% or more of the partners had to be women. If the firm was a corporation, female ownership of 50% or more of the stock was required. The above criteria for sole proprietorships, partnerships, and corporations correspond to the 1976 definition of woman-ownership established by the Office of Minority Business Enterprise. In addition to all of the above criteria, key personnel or initiators needed to be females. Furthermore, these females had to display considerable latitude in running their operation.

Women managers were included if they had direct supervisory or managerial responsibility for subordinates. This definition
covers a broad range of job levels, from low-level supervisors to corporation presidents. An attempt was made to sample from all levels; however, high-level women managers were difficult to locate because of small numbers.

Secretaries included in the study were those women who presented themselves as secretaries. It is recognized that some women labelled secretaries have a large amount of informal power, and may in some respects overlap with managers. However, it was decided that less ambiguity would result if formal job titles were followed in classifying subjects.

Forty-seven subjects were included in each group of the study. There were three groups: business owners; managers; and secretaries.

Procedure

Subjects were given the study materials in a packet, either by mail or in person. The packets consisted of a demographic data sheet and four inventories. The subjects were asked to fill out the inventories in a certain order, and the order was varied between subjects.

The demographic data forms requested information about each participant's personal background, education, work history and current position. Questions about participants' role-models for business ownership were contained in the demographic data forms. (Appendix A contains the demographic data forms.)
Instruments

Mehrabian and Bank Achievement Questionnaire

This scale (Mehrabian & Bank, 1978) was used to measure the achievement motivation of the participants. The scale, which contains 38 items, draws its content from nearly all aspects of the achievement literature. The scale was refined by developing items with low correlation with social desirability and high item-total score correlation. The 38 items are balanced for response bias; the inventory contains 19 positively-worded and 19 negatively-worded self-descriptive statements. An example of a positively-worded statement is "I find it especially satisfying to complete an important job that required a lot of effort." An example of a negatively-worded statement is "I have difficulty working in a new and unfamiliar situation." Subjects are asked to respond using a 9-point scale which ranges from +4 (strong agreement) to zero (neither agreement nor disagreement) to -4 (strong disagreement). The total score is obtained by subtracting the scores on negatively-worded items from the scores on positively-worded items.

A reliability coefficient of .91 was obtained using the KR-20 formula (Mehrabian and Bank, 1978). Construct validity was assessed by comparing scores of this instrument with scores on the Jackson (1967) achievement scale and Mehrabian's (1969) measures of achievement motivation for males and females. Scores of the present scale correlated .74 with Jackson's (1967) scale, .59 with Mehrabian's (1969) scale for males, and .68 with Mehrabian's (1969) scale for females. Validity and reliability of the instrument were considered
satisfactory for the purposes of this study. (Appendix B contains a copy of the instrument.)

Rotter's Locus of Control Scale

The Rotter (1966) scale, also known as the Internal-External Control Scale, consists of 23 forced-choice I/E items, along with six filler items to help disguise the nature of the test. On each scored item, the participant is asked to choose between two statements about the cause of events in various life situations. The total score is the number of items on which the participant chose a statement suggesting external causation of events. The scale is a measure of the individual's generalized expectancy that his/her reinforcements are controlled by his/her behaviors. An internal orientation indicates that the person believes that reinforcements and behaviors are closely related; an external orientation indicates that the person believes there is little relationship between reinforcements and behaviors.

Rotter (1966) has reported test-retest reliabilities of .83 and .61 for one and two months, respectively, for female college students. The reported internal consistency for female college students was .79 (Spearman-Brown formula). Construct validity has been studied by comparing the I/E scores of different groups to see whether differences in group averages are in the anticipated direction. Many studies indicate that whites are more internal in locus of control than blacks (Phares, 1978) and that middle-class children are more internal than lower-class children (Gruen & Ottinger, 1969). These differences are in the anticipated
direction in that they reflect actual differences in power and mobility of the different social classes. Mental patients and maladjusted persons are usually pictured as experiencing a low degree of control over their lives (Strong, 1978). Therefore it could be anticipated that a "normal" group would be more internal than a maladjusted or pathological group. Research results indicate that this is usually the case (Phares, 1978). Persons who believe they are responsible for their own health would be expected to seek more information about their health and be more vigilant in guarding it. Most studies do indeed suggest that persons rated as "internals" do seek more information and do safeguard their health more effectively than "externals." To summarize, the above results contribute to the construct validity of the locus of control concept and Rotter's (1966) locus of control scale. Reliability and validity of the instrument were considered satisfactory for the purposes of this study. (Appendix B contains a copy of the instrument.)

Bem Sex-Role Inventory

The Bem (1974) Sex-Role Inventory (BSRI) is intended to measure the sex-role orientation of individuals. It does so by measuring the degree to which a person endorses qualities that have been consensually regarded as desirable either for males or for females. In general, masculine qualities relate to instrumentality and assertiveness, and feminine qualities relate to nurturance and expressiveness. The BSRI has independent masculine and feminine scales, so that an individual can score high on both scales or low
on both scales.

The scale has 60 items, all of which are personality characteristics describing an individual. The participant is asked to indicate how true each characteristic is of her on a scale of 1 ("never or almost never true") to 7 ("always or almost always true"). Of the 60 items, 20 are used to obtain a "masculinity" score, 20 are used to obtain a "femininity" score, and 20 are used to obtain a social desirability score. Usually a score is obtained for each scale by adding the 20 item-scores for each scale and dividing by 20. However, in this study, only the "masculinity" average was calculated for each participant.

The BSRI is frequently used to categorize individuals into one of four sex-role categories for research purposes:

1. "masculine" (high masculine - low feminine);
2. "feminine" (low masculine - high feminine);
3. "androgynous" (high masculine - high feminine); and
4. "undifferentiated" (low masculine - low feminine).

Individual scores on a scale are considered "high" or "low" in comparison to previously calculated normative medians. The four categories were developed by Bem (1974) and Spence, Helmreich and Stapp (1974). This categorization scheme, however, was not used in this study.

This study uses the "masculinity" scale of the BSRI. Bem (1974) reports the 4-week test-retest reliability of the scale to be \( r = .90 \). Studies to ascertain the validity of the scale have taken two approaches. First, scale scores were used to predict
subject behavior in a task that was consensually judged to be sex-typed. Bem (1975) found that, in a conformity paradigm, masculine-typed subjects exhibited significantly more independence than feminine-typed subjects. In a second approach to validity confirmation, sex-type scores were used to predict behavioral preferences. Bem and Lenney (1976) found that sex-typed individuals ("masculine" or "feminine") prefer sex-appropriate behaviors, even when there was a small economic penalty. Based on the available validity and reliability data, it was decided that the instrument had satisfactory reliability and validity for the purposes of this study.

**Brophy Vocational Satisfaction Scale**

The Brophy (1959) scale was used to measure vocational satisfaction in the present study. The scale has three questions, in which the respondent is asked to rate her job satisfaction for the past two months from three different perspectives:

1. Overall;
2. In comparison to people her own age and sex;
3. In terms of percentage of time satisfied.

A 9-point anchored scale is used in responding to the first question. Seven-point anchored scales are used in responding to the second and third questions. The total score is obtained by adding the scores for the three items. The questions on the test were adapted from the work of Watson (1930), Sailer (1931), Hartmann (1934) and Hoppock (1935) on personal happiness and job satisfaction.

The one-week test-retest reliability coefficient for the Brophy scale is .97 (Brophy, 1959). Construct validity of the scale
is suggested by significant correlations with related concepts and discrepancies between concepts (Brophy, 1959). (See Table 2.) The reliability and validity of the instrument were considered satisfactory for the purposes of this study. (A copy of the Brophy scale is contained in Appendix B.)

Table 2
Correlation Coefficients Supporting Construct Validity of Brophy Scale

<table>
<thead>
<tr>
<th>Correlation between Vocational Satisfaction and</th>
<th>Coefficient Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-concept - imposed occupational role discrepancy</td>
<td>-.41</td>
</tr>
<tr>
<td>Ideal occupational role - imposed occupational role discrepancy</td>
<td>-.45</td>
</tr>
<tr>
<td>Self-concept - ideal occupational role discrepancy</td>
<td>-.28</td>
</tr>
<tr>
<td>Self-concept - ideal self discrepancy</td>
<td>-.50</td>
</tr>
<tr>
<td>Occupational role acceptance</td>
<td>.41</td>
</tr>
<tr>
<td>General satisfaction</td>
<td>.50</td>
</tr>
</tbody>
</table>
Hypotheses

I. The model consisting of the variables:
   (1) Achievement motivation;
   (2) Locus of control;
   (3) Sex-role masculinity; and
   (4) Models of ownership

will significantly discriminate between female owners, managers, and secretaries.

II. The achievement motivation of women owners will not be significantly different from that of women managers, but will be greater than that of women secretaries.

III. Women owners will be significantly more internal on locus of control than either secretaries or managers.

IV. Women owners will score significantly higher on the BSRI "masculinity" scale than either managers or secretaries.

V. Women owners will have significantly more parental models for ownership than managers or secretaries.

VI. Women owners will have significantly more non-parental models for ownership than managers or secretaries.

VII. For women owners, job satisfaction will be significantly related to achievement motivation, internality, "masculinity," and model availability in a positive linear fashion.

VIII. For women owners, success, as measured by tenure, will be significantly related to achievement motivation, internality, "masculinity," and model availability in a positive linear fashion.

IX. Individual women managers and secretaries can be represented
by their set of scores for achievement motivation, locus of control internality, sex-role "masculinity," and presence of models for ownership, both parental and others. Although each manager or secretary is a member of her given occupational group, it is possible that her set of scores may closely resemble the scores of an occupational group other than her own. A woman secretary or manager could be said to be "misallocated" if her set of scores resembles those of an occupational group (e.g., owner) other than her own. It is predicted that managers and secretaries whose scores resemble those of owners will exhibit significantly less job satisfaction than those managers and secretaries whose scores resemble those of their own actual occupational group.
Chapter 4

Data Analysis and Results

Comparison of Groups

Female self-employed, managers, and secretaries are compared on the following dimensions:

(1) Achievement motivation;
(2) Locus of control;
(3) BSRI "masculinity" score;
(4) Parental models for ownership; and
(5) Non-parental models for ownership.

An overall comparison considering all variables simultaneously was done using MANOVA (Tatsuoka, 1971). Such an analysis provides

(1) Evidence on whether this group of variables, as a whole, significantly distinguishes the three groups of subjects;
(2) Information on which specific variables convey most of the explanatory power of the model.

The Multivariance computer program (Finn, 1972) is used to analyze the data.

It is recognized that differences in the values of psychological variables may result from extraneous factors rather than group membership. In order to compensate for this possibility, age and education were used as covariates in the design.
The three occupational groups (owners, managers and secretaries) were also compared pairwise on the same variables as above, with the variables taken one at a time. Univariate analysis of variance (Keppel, 1973) was used.

**Prediction of Success and Satisfaction**

For owners only, multiple linear regression (Hays, 1973) was used to predict success (months in business) and satisfaction (Brophy scale) of the owners. Independent variables are:

1. Achievement motivation;
2. Locus of control;
3. Sex-role "masculinity;"
4. Parental models for ownership; and
5. Non-parental models for ownership.

Output from this statistical approach includes:

1. Percentage of variance in dependent variables explained by independent variables;
2. A regression equation for each dependent variable, showing which independent variables are most responsible for explaining variance in the dependent variable.

The Multivariance computer program (Finn, 1972) is used to analyze the data.

**Job Satisfaction of "Misallocated" Managers and Secretaries**

Each manager and secretary was represented by a set of six scores (achievement motivation, locus of control, sex-role "masculinity," and models for business ownership (father, mother, and other). Discriminant function analysis (Tatsuoka, 1971) was used.
to determine that the set of six variables successfully discriminated among the three groups of participants. A second analysis, classification analysis (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975), was then performed on the data in order to classify each case into its "most probable" group, based on the six scores of the case. Although each occupational group tended to have its members clustered with respect to the six variables, there were a number of members whose sets of variables had non-typical values. For example, although there were a large number of managers whose values on the six variables fell comfortably within the typical range for managers, there were also a number of managers whose values more closely resembled either those of the typical owner or those of the typical secretary. Likewise, there were secretaries whose sets of six values did not resemble those of the typical secretary but rather those of a business owner or manager. Classification analysis (Nie et al, 1975) assigned each case (participant) to a "most probable" group based on the case's set of six scores in comparison to the three distributions of variable values for the three occupational groups. Finally, in order to test Hypothesis IX, the job satisfaction of managers whose "most probable" group was "manager" was compared to the job satisfaction of managers whose "most probable" group was "business owner," using analysis of variance (Hays, 1973). In a similar fashion, the job satisfaction of secretaries whose "most probable" group was "secretary" was compared to the job satisfaction of secretaries whose "most probable" group was "business owner."
Results

Sample Characteristics: Owners, Managers and Secretaries

Tables 3 through 6 present some comparisons on variables that are pertinent to all three groups of participants. Presented in Table 3 are data on the participants' average work week.

Table 3

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Work Week (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>51.8</td>
</tr>
<tr>
<td>Managers</td>
<td>44.8</td>
</tr>
<tr>
<td>Secretaries</td>
<td>39.0</td>
</tr>
</tbody>
</table>

As shown in Table 3, the average business owner in the sample spent more than 50 hours per week at work. This amount of time was greater than the typical 40-hour work-week and was longer than the average work-week of the other two groups in the study. Analysis of variance (Hays, 1973) of the hours worked by each group indicated that these differences were significant ($p < .001$).

Presented in Table 4 are data on the marital status of participants. As shown in Table 4, over 60% of the owners reported that they were married, and slightly under half reported that they had children living with them. The percentage of married owners was the highest for the three groups studied. Although the time demands of ownership were high, the business owners appeared to have some time and energy remaining to participate in family life.
### Table 4

Marital Status of Participants

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Percentage of Group in Status</th>
<th>Owners</th>
<th>Managers</th>
<th>Secretaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>6.4%</td>
<td>31.9%</td>
<td>23.4%</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>61.7</td>
<td>51.1</td>
<td>57.4</td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>27.6</td>
<td>14.9</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>2.1</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>2.1</td>
<td>2.1</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

*a n = 47 for each group.*

*b 46.8% of owners reported children living with them.*
Presented in Table 5 are data on the educational level of participants.

Table 5

Educational Level of Participants

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>15.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Managers</td>
<td>15.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Secretaries</td>
<td>13.4</td>
<td>1.3</td>
</tr>
</tbody>
</table>

As shown in Table 5, the mean education of all three groups was in the range between 12 and 16 years. However, the mean level of owners and managers was about the same and was in excess of that of secretaries. There are no formal educational requirements for business ownership, but the owners did tend to have education beyond the high-school diploma, and the additional education was typically in the form of college courses.

Presented in Table 6 are data on the age of participants.

Table 6

Age of Participants

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>41.2</td>
<td>9.7</td>
</tr>
<tr>
<td>Managers</td>
<td>38.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Secretaries</td>
<td>39.0</td>
<td>12.9</td>
</tr>
</tbody>
</table>

As shown in Table 6, the average business owner was in her early 40's, with the majority in the 30-50 year range. In terms of
average age and age distribution, there was little difference between the three groups studied.

Sample Characteristics: Owners

Tables 7 through 12 present data pertinent to the sample of owners. Presented in Table 7 are data on the owners' length of time in current business.

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage of Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 yr.</td>
<td>13.0%</td>
</tr>
<tr>
<td>1 yr. to 4 yrs., 11 mos.</td>
<td>50.0</td>
</tr>
<tr>
<td>5 yrs. to 9 yrs., 11 mos.</td>
<td>19.6</td>
</tr>
<tr>
<td>Over 10 yrs.</td>
<td>17.4</td>
</tr>
</tbody>
</table>

Note. Average time was 5 yrs.

As shown in Table 7, the average enterprise in the study was five years old. A majority of the enterprises in the study were less than five years old, but there were a few companies that had been in business a long time and these older businesses had a heavy impact on the average.

Presented in Table 8 are data on owners' willingness to work as an employee. As shown in Table 8, business owners in general appeared to be satisfied with their choice of self-employment. About one-fifth of the owners stated without reservation that they would be willing to work for someone else in the future. The rest, however, or about four-fifths of the sample, were either totally opposed to working for someone else or would consider it only
under certain circumstances.

Table 8
Willingness of Owners to Work as an Employee

<table>
<thead>
<tr>
<th>Classification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willing</td>
<td>21.3%</td>
</tr>
<tr>
<td>Unwilling</td>
<td>29.8%</td>
</tr>
<tr>
<td>Possibly willing</td>
<td>48.9%</td>
</tr>
</tbody>
</table>

Presented in Table 9 are data on the legal structure of owners' businesses.

Table 9
Legal Structure of Owners' Businesses

<table>
<thead>
<tr>
<th>Structure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Proprietorship</td>
<td>40.0%</td>
</tr>
<tr>
<td>Partnership</td>
<td>4.4%</td>
</tr>
<tr>
<td>Corporation</td>
<td>55.6%</td>
</tr>
</tbody>
</table>

Average number of stockholders was 2.4.

As shown in Table 9, the corporate form of ownership was most popular, with over half of the owners reporting this form of ownership. Sole proprietorships were also well-represented in the sample, but were less than half. There were only a few partnerships reported.

Presented in Table 10 are data on gross annual receipts of owners' businesses. As shown in Table 10, there was a broad range of sales revenues reported by the owners. By the size standards
of the Small Business Administration, however, the great majority of the businesses would be considered small businesses (Select Committee on Small Business, 1980).

Table 10

Gross Annual Receipts of Owners' Businesses

<table>
<thead>
<tr>
<th>Range of Gross Annual Receipts</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $5,000</td>
<td>4.5%</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>4.5%</td>
</tr>
<tr>
<td>$10,000 - $24,999</td>
<td>9.1%</td>
</tr>
<tr>
<td>$25,000 - $49,999</td>
<td>9.1%</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>9.1%</td>
</tr>
<tr>
<td>$100,000 - $199,999</td>
<td>29.5%</td>
</tr>
<tr>
<td>$200,000 - $499,999</td>
<td>15.9%</td>
</tr>
<tr>
<td>$500,000 - $999,999</td>
<td>6.8%</td>
</tr>
<tr>
<td>Over $1,000,000</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

Presented in Table 11 are data on the number of employees in owners' businesses.

Table 11

Number of Employees in Owners' Businesses

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers only</td>
<td>0.0%</td>
</tr>
<tr>
<td>None</td>
<td>10.6%</td>
</tr>
<tr>
<td>Part-time or temporary only</td>
<td>8.5%</td>
</tr>
<tr>
<td>1 to 4</td>
<td>38.3%</td>
</tr>
<tr>
<td>5 to 9</td>
<td>12.8%</td>
</tr>
<tr>
<td>10 to 19</td>
<td>10.6%</td>
</tr>
<tr>
<td>20 to 49</td>
<td>14.9%</td>
</tr>
<tr>
<td>50 to 99</td>
<td>4.3%</td>
</tr>
<tr>
<td>100 or more</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
As shown in Table 11, about four-fifths of the sample had fewer than 20 employees. The low number of employees was another indication of the relatively small size of these businesses.

Presented in Table 12 are data on the net annual incomes of owners' businesses.

Table 12

<table>
<thead>
<tr>
<th>Range of Net Annual Income</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss</td>
<td>7.0%</td>
</tr>
<tr>
<td>$0 - $4,999</td>
<td>13.9%</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>9.3%</td>
</tr>
<tr>
<td>$10,000 - $24,999</td>
<td>20.9%</td>
</tr>
<tr>
<td>$25,000 - $49,999</td>
<td>25.6%</td>
</tr>
<tr>
<td>Over $50,000</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

Note. Seventy-seven percent of owners reported they were self-supporting from their businesses.

As shown in Table 12, ownership appears to provide financial potential as well as risks; roughly half of the owners reported net income in excess of $25,000 per year, but a few did report losses. Net income figures must be treated with some caution because the numbers can be substantially affected by the accounting standards underlying the report. In any event, the net income figures were gathered so that some idea of the financial success of the enterprises could be obtained.

Sample Characteristics: Managers

Tables 13 and 14 present data pertinent to managers. Questions about the managers' salaries and number of subordinates were
included in the participants' questionnaires in order to gain some idea of the level of the female managers.

Presented in Table 13 are data on the annual salaries of female managers in the study.

Table 13

<table>
<thead>
<tr>
<th>Salary Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $5,000</td>
<td>0.0%</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>4.3%</td>
</tr>
<tr>
<td>$10,000 - $14,999</td>
<td>6.5%</td>
</tr>
<tr>
<td>$15,000 - $19,999</td>
<td>26.1%</td>
</tr>
<tr>
<td>$20,000 - $29,999</td>
<td>34.8%</td>
</tr>
<tr>
<td>$30,000 - $39,999</td>
<td>21.7%</td>
</tr>
<tr>
<td>$40,000 - $49,999</td>
<td>2.2%</td>
</tr>
<tr>
<td>$50,000 - $100,000</td>
<td>4.3%</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

As shown in Table 13, only a few managers earned over $40,000 per year. An informal comparison of Table 13, Annual Salaries of Managers, with published data on administrative salaries (U.S. Department of Labor, 1981) suggests that only a small percentage of the women managers had reached high levels of management.

Presented in Table 14 are data on the number of subordinates reporting to managers. As shown in Table 14, a majority of the female managers had fewer than 20 subordinates reporting to them. This is another indication that the managers in the survey tended to be mostly low- and middle-level managers. It should also be noted that a few of the managers reported such large numbers of
subordinates that it is possible that they misinterpreted the question.

Table 14

Number of Subordinates Reporting to Managers (Directly and Indirectly)

<table>
<thead>
<tr>
<th>Range of Subordinates Reporting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 10</td>
<td>51.1%</td>
</tr>
<tr>
<td>10 - 20</td>
<td>21.3%</td>
</tr>
<tr>
<td>20 - 50</td>
<td>10.6%</td>
</tr>
<tr>
<td>50 - 100</td>
<td>6.4%</td>
</tr>
<tr>
<td>Over 100</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Sample Characteristics: Secretaries

In order to gain some idea of the level of the secretaries in the study, a question about salaries was included in the secretaries' questionnaire. Presented in Table 15 are data on the annual salaries of secretaries.

Table 15

Annual Salaries of Secretaries

<table>
<thead>
<tr>
<th>Salary Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $9,999</td>
<td>0.0%</td>
</tr>
<tr>
<td>$10,000 - $14,999</td>
<td>40.4%</td>
</tr>
<tr>
<td>$15,000 - $19,999</td>
<td>51.1%</td>
</tr>
<tr>
<td>$20,000 - $29,999</td>
<td>8.5%</td>
</tr>
<tr>
<td>Over $30,000</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

As shown in Table 15, a large majority of secretaries were paid in the $10,000 - $20,000 range of annual salary. An informal comparison of this table with published data on secretarial salaries (U.S. Department of Labor, 1981) suggests that the study respondents included secretaries from low, middle and high levels.
Tests of Hypotheses: Hypothesis I

Hypothesis I states that the model consisting of the variables:

(1) Achievement motivation;
(2) Locus of control;
(3) Sex-role "masculinity;" and
(4) Models for ownership - father, mother, other

will significantly discriminate between female owners, managers and secretaries. The data lend support to this hypothesis:

Multivariate $F = 5.58$, with 12 and 262 degrees of freedom, $p < .0001$.

Since the multivariate analysis suggests significant differences for the overall model, a univariate analysis is presented in Table 16 to indicate which variables are most strongly associated with group membership (owners, managers, or secretaries).

Table 16

Univariate Analysis of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate $F$</th>
<th>$p$ less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus of control</td>
<td>2.22</td>
<td>.1129</td>
</tr>
<tr>
<td>BSRI &quot;masculinity&quot; scale</td>
<td>23.72</td>
<td>.0001</td>
</tr>
<tr>
<td>Business ownership - father</td>
<td>3.54</td>
<td>.0318</td>
</tr>
<tr>
<td>Business ownership - mother</td>
<td>5.54</td>
<td>.0049</td>
</tr>
<tr>
<td>Business ownership - others</td>
<td>1.18</td>
<td>.3095</td>
</tr>
<tr>
<td>Achievement motivation</td>
<td>8.70</td>
<td>.0003</td>
</tr>
</tbody>
</table>
Tests of Hypotheses: Hypothesis II

Hypothesis II states that the achievement motivation of women owners will not be significantly different from that of women managers, but will be greater than that of women secretaries. The data lend support to this hypothesis.

Presented in Table 17 are the mean achievement motivation scores for each occupational group of women.

Table 17
Achievement Motivation of Women Owners, Managers and Secretaries

<table>
<thead>
<tr>
<th>Group</th>
<th>Achievement Motivation Scores</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Owners</td>
<td>94.0000</td>
<td>28.8210</td>
</tr>
<tr>
<td>Managers</td>
<td>96.4255</td>
<td>24.0477</td>
</tr>
<tr>
<td>Secretaries</td>
<td>74.2766</td>
<td>26.3147</td>
</tr>
</tbody>
</table>

As shown in Table 17, there appears to be only a small difference in the achievement motivation of owners and managers, and both appear to exceed the achievement motivation of secretaries by a wide margin.

Presented in Table 18 are the results of planned pairwise comparisons between owners' achievement motivation and the achievement motivation of the other two occupational groups. As shown in Table 18, the achievement motivation of owners and managers did not appear to be significantly different. The difference in the achievement motivation of owners and secretaries, however, appeared to be significant ($p < .001$).
Table 18

Achievement Motivation: Women Owners Compared to Managers and Secretaries

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F - Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners - Managers</td>
<td>.1945</td>
<td>n.s.</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>12.8625</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note. n = 47 for each group.

Tests of Hypotheses: Hypothesis III

Hypothesis III states that women owners will be significantly more internal on locus of control than either secretaries or managers. The data lend only partial support to this hypothesis.

Presented in Table 19 are the mean locus of control scores for the three occupational groups.

Table 19

Locus of Control Scores for Women Owners, Managers and Secretaries

<table>
<thead>
<tr>
<th>Group</th>
<th>Locus of Control Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Owners</td>
<td>6.6808</td>
</tr>
<tr>
<td>Managers</td>
<td>7.5106</td>
</tr>
<tr>
<td>Secretaries</td>
<td>8.3617</td>
</tr>
</tbody>
</table>

As shown in Table 19, the mean locus of control score for owners was lower (more internal) than that of managers or secretaries.

Presented in Table 20 are the results of planned pairwise comparisons between owners' locus of control and the locus of control of the other two groups.
Table 20

Locus of Control: Women Owners Compared to Managers and Secretaries

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F - Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners - Managers</td>
<td>1.0330</td>
<td>n.s.</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>4.2388</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note. n = 47 for each group.

As shown in Table 20, the difference in the locus of control scores of owners and secretaries appeared to be significant (p < .05). However, the difference in the scores of owners and managers did not reach significance.

Tests of Hypotheses: Hypothesis IV

Hypothesis IV states that women owners will score significantly higher on the BSRI "masculinity" scale than either managers or secretaries. The data lend only partial support to this hypothesis.

Presented in Table 21 are the mean BSRI "masculinity" scores for the three occupational groups.

Table 21

BSRI "Masculinity" Scores for Women Owners, Managers and Secretaries

<table>
<thead>
<tr>
<th>Group</th>
<th>BSRI &quot;Masculinity&quot; Scores</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td></td>
<td>5.6548</td>
<td>.5271</td>
</tr>
<tr>
<td>Managers</td>
<td></td>
<td>5.4646</td>
<td>.6047</td>
</tr>
<tr>
<td>Secretaries</td>
<td></td>
<td>4.8070</td>
<td>.6435</td>
</tr>
</tbody>
</table>

As shown in Table 21, the mean BSRI "masculinity" score of owners exceeded that of managers and secretaries.
Presented in Table 22 are the results of planned pairwise comparisons between the BSRI "masculinity" scores of owners and those of managers and secretaries.

Table 22

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F-Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners - Managers</td>
<td>2.3879</td>
<td>n.s.</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>47.4466</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note.  n = 47 for each group.

As shown in Table 22, the difference in BSRI "masculinity" scores between owners and secretaries appeared to be significant (p < .001). However, the difference in the scores of owners and managers did not reach a significant level.

Tests of Hypotheses: Hypothesis V

Hypothesis V states that women owners will have significantly more parental models for ownership than managers or secretaries. The data lend support to this hypothesis.

Presented in Table 23 are data on the percentage of each occupational group reporting ownership of a business by father.

Table 23

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>63.8%</td>
</tr>
<tr>
<td>Managers</td>
<td>42.6</td>
</tr>
<tr>
<td>Secretaries</td>
<td>36.2</td>
</tr>
</tbody>
</table>
As shown in Table 23, the owners tended to have a higher percentage of fathers who were owners than did managers or secretaries.

Presented in Table 24 are the results of planned pairwise comparisons between owners and the other two groups on the number of fathers owning businesses.

Table 24

Business Ownership by Father: Women Owners Compared to Managers and Secretaries

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F-Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners - Managers</td>
<td>4.3776</td>
<td>.05</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>7.3957</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. n = 47 for each group.

As shown in Table 24, female owners tended to have a significantly higher number of fathers who were owners than did either managers (p < .05) or secretaries (p < .01).

Women business owners also had significantly more mothers who owned businesses than did women managers or secretaries. Presented in Table 25 are data on the percentage of each occupational group reporting ownership of a business by mother.

Table 25

Participants Reporting Ownership of a Business by Mother

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>31.9%</td>
</tr>
<tr>
<td>Managers</td>
<td>8.5</td>
</tr>
<tr>
<td>Secretaries</td>
<td>8.5</td>
</tr>
</tbody>
</table>
As shown in Table 25, the owners tended to have a higher percentage of mothers who were owners than did managers or secretaries. 

Presented in Table 26 are the results of planned pairwise comparisons between owners and the other two groups on the number of mothers owning businesses.

Table 26

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F-Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner - Managers</td>
<td>10.3357</td>
<td>.01</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>10.3357</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. n = 47 for each group.

As shown in Table 26, there were significant differences (p < .01) between owners and the other two groups in the number of mothers who owned businesses.

Tests of Hypotheses: Hypothesis VI

Hypothesis VI states that women owners will have significantly more non-parental models for ownership than managers or secretaries. The data did not lend support to this hypothesis.

Presented in Table 27 are data on the percentage of each occupational group reporting ownership of a business by someone of their acquaintance other than a parent. As shown in Table 27, owners reported a higher percentage of non-parental persons of their acquaintance who owned businesses than did managers or secretaries.
Table 27

Participants Reporting Acquaintance with a Business Owner other than Parents

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>93.6%</td>
</tr>
<tr>
<td>Managers</td>
<td>91.5</td>
</tr>
<tr>
<td>Secretaries</td>
<td>85.1</td>
</tr>
</tbody>
</table>

Presented in Table 28 are the results of planned pairwise comparisons between owners and the other two occupational groups on the number of non-parental persons of their acquaintance who owned businesses.

Table 28

Acquaintance with a Business Owner other than Parents: Comparison of Women Owners, Managers and Secretaries

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F-Statistic</th>
<th>p less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners - Managers</td>
<td>.1196</td>
<td>n.s.</td>
</tr>
<tr>
<td>Owners - Secretaries</td>
<td>1.9017</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Note. n = 47 for each group.

As shown in Table 28, the differences did not reach a significant level for either comparison.

Tests of Hypotheses: Hypothesis VII

Hypothesis VII states that for women owners, job satisfaction will be significantly related to achievement motivation, internality, BSRI "masculinity," and model availability in a positive linear fashion. The data did not lend support to this hypothesis. The F-statistic for the relationship was .4057 (not significant)
with 6 and 40 degrees of freedom.

Tests of Hypotheses: Hypothesis VIII

Hypothesis VIII states that for women owners, success, as measured by tenure, will be significantly related to achievement motivation, internality, BSRI "masculinity," and model availability in a positive linear fashion. The data did not lend support to this hypothesis. However, one individual variable, mother's business ownership, appeared to be related to success ($r=0.42, p<0.01, d.f.=44$).

Tests of Hypotheses: Hypothesis IX

In order to test Hypothesis IX, all managers were classified into one of three "most probable" occupational groups, based on a comparison of the managers' six variable scores to the three distributions of scores for the occupational groups. Classification analysis (Nie et al, 1975) was used to make this classification. The mean job satisfaction of those managers whose "most probable" group was "manager" was compared to the mean job satisfaction of those managers whose "most probable" group was "owner." The results of the comparison are presented in Table 29. The difference in mean job satisfaction was not significant.

Table 29

Mean Job Satisfaction of Women Managers

<table>
<thead>
<tr>
<th>&quot;Most Probable&quot; Group</th>
<th>Number Classified</th>
<th>Mean Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>22</td>
<td>20.36</td>
</tr>
<tr>
<td>Owner</td>
<td>11</td>
<td>20.27</td>
</tr>
</tbody>
</table>

Total of 47 managers were classified. There were 14 managers classified as "secretaries."
In a similar fashion, all secretaries were classified, and the mean job satisfaction of those secretaries whose "most probable" group was "secretary" was compared to the mean job satisfaction of those secretaries whose "most probable" group was "owner."
The results of the comparison are presented in Table 30. The difference in mean job satisfaction was in the predicted direction. However, because of the small number of "misallocated" secretaries, the use of statistical inference did not seem warranted in this case.

Table 30

Mean Job Satisfaction Scores of Women Secretaries

<table>
<thead>
<tr>
<th>&quot;Most Probable&quot; Group</th>
<th>Number Classified into</th>
<th>Mean Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>33</td>
<td>18.30</td>
</tr>
<tr>
<td>Owner</td>
<td>4</td>
<td>16.50</td>
</tr>
</tbody>
</table>

Total of 47 secretaries were classified. There were 10 secretaries classified as "managers."

Summary of Results by Hypothesis

Hypothesis I. The group of variables:

1. Achievement motivation;
2. Locus of control;
3. Sex-role "masculinity;"
4. Models for ownership - father;
5. Models for ownership - mother; and
6. Models for ownership - other;
considered simultaneously, will discriminate between female owners,
managers and secretaries. The hypothesis was supported (p < .0001).

Hypothesis II. The achievement motivation of women owners will not be significantly different from that of women managers, but will be greater than that of women secretaries. Both parts of the hypothesis were supported. The difference in achievement motivation between owners and secretaries was in the predicted direction and significant (p < .001).

Hypothesis III. Women owners will be more internal on locus of control than either managers or secretaries. The hypothesis was partially supported. Women owners were significantly more internal on locus of control than secretaries (p < .05). The difference in locus of control between owners and managers was in the predicted direction but was not significant.

Hypothesis IV. Women owners will score higher on the BSRI "masculinity" scale than either managers or secretaries. The hypothesis was partially supported. The women owners scored significantly higher on the "masculinity" scale than the secretaries (p < .001). The difference in "masculinity" scale scores between owners and managers was in the predicted direction but was not significant.

Hypothesis V. Women owners will have more parental models for ownership than managers or secretaries. The hypothesis was supported. There were significantly more fathers who were business owners among the women owners than among the women managers (p < .05) or the women secretaries (p < .01). There were significantly more mothers who were business owners among the women owners than among
the women managers \((p < .01)\) or the women secretaries \((p < .01)\).

Hypothesis VI. Women owners will have more non-parental models for ownership than managers or secretaries. This hypothesis was not supported.

Hypothesis VII. The job satisfaction of women owners will be related to achievement motivation, internality, BSRI "masculinity," and model availability (variables considered simultaneously) in a positive linear fashion. The hypothesis was not supported.

Hypothesis VIII. The success of women owners, as measured by tenure, will be related to achievement motivation, internality, BSRI "masculinity," and model availability (variables considered simultaneously) in a positive linear fashion. The hypothesis was not supported.

Hypothesis IX. All participants were classified into one of three "most probable" occupational groups ("owner," "manager" or "secretary") on the basis of their scores on six psychological variables. It was predicted that the job satisfaction of women managers whose "most probable" group was "owner" would be less than the job satisfaction of managers whose "most probable" group was "manager." The hypothesis was not supported. It was also predicted that the job satisfaction of women secretaries whose "most probable" group was "owner" would be less than the job satisfaction of secretaries whose "most probable" group was "secretary." The hypothesis was not tested because of the low number of secretaries classified as "owners."
Hypotheses

Hypothesis I predicted that six variables (achievement motivation, locus of control, sex-role "masculinity," and availability of models for ownership - father, mother, and others), considered simultaneously, would discriminate between women owners, managers, and secretaries. The hypothesis was supported ($p < .0001$). Examination of Table 16, the Univariate Analysis of Variance, indicates that the six variables make widely differing contributions to the discriminating power of the multivariate model. The Bem "masculine" sex-role score, parental role-model availability, and achievement motivation appear to contribute more to the discriminating power of the model than locus of control or availability of non-parental role-models. The sex-role variable, as measured by the BSRI "masculinity" scale, is relatively new in the literature on self-employment. The univariate analysis suggests that sex-role may be at least as important as other variables which have been investigated in research on self-employment. Additional evidence to support the hypothesized relationship between BSRI "masculinity" and the choice of self-employment would be desirable.

Hypotheses II, III and IV are concerned with some of the personality characteristics of owners, managers and secretaries. More specifically, the achievement motivation, locus of control and "mas-
culine" sex-role variables are compared for the three groups of participants. For all three hypotheses, the differences in personality characteristics appeared in comparisons between owners and secretaries. In comparisons between owners and managers, the differences in personality characteristics did not reach significance. These findings offer qualified support to the position (Gannon, 1979) that owners and managers differ only in their exposure to certain external stimuli. The only significant difference between owners and managers found in the present study was the availability of parental role-models, clearly external stimuli. However, it is probable that the presence of these external stimuli, parents, strongly influenced the participants' beliefs and expectations about business ownership. In other words, the external stimuli led to a change in internal dispositions regarding business ownership. These findings also offer support to McClelland's (1961) assumption that management is an entrepreneurial activity.

Hypothesis II stated that the achievement motivation of women owners will not be significantly different from that of women managers, but will be greater than that of women secretaries. Data lend support to both parts of this hypothesis. Evidently, female managers find enough challenges in the managerial work environment that they choose to remain in that environment rather than find another occupation. Secretaries appear to have a lower need for achievement than either owners or managers. Evidently they choose to remain in the secretarial environment where a somewhat lower level of challenge is typical.
Hypothesis III stated that women owners will be significantly more internal on locus of control than either managers or secretaries. Examination of the data revealed that owners appeared to be significantly more internal than secretaries; however, no significant difference was found between owners and managers. A number of previous studies had indicated that the locus of control of male and female business owners was internal relative to the general population. The present study suggests that the locus of owners does tend to be internal, but that there may be other occupations, such as management, that have relatively internal locus of control scores.

Hypothesis IV stated that women owners will score significantly higher (more "masculine") on the BSRI "masculinity" scale than either managers or secretaries. Data in the present study suggested that women owners are significantly higher than secretaries on BSRI "masculinity." However, no significant difference was found between owners and managers. Demarest (1977) observed that women owners in her study appeared comfortable with many work attitudes that were typically masculine, and speculated that the BSRI might be useful in measuring some of these attitudes. The results of the present study tend to confirm that the "masculine" sex-role variable is very relevant to entrepreneurship. However, the present study also suggests that the importance of the "masculine" sex-role is not limited to ownership but also touches managerial occupations. Along the same lines, Wolfe and Betz (1981) have presented some preliminary evidence that the "masculine" sex-role may be related to the whole range of non-traditional occupations for females. Finally, it should be noted that the
similarity of BSRI scores for managers and owners lends additional support to the idea that management and ownership are similar activities.

Hypotheses V and VI pertain to the influence of models on the career choice of self-employment. Hypothesis V stated that women business owners will have significantly more parental models for ownership than managers or secretaries. The hypothesis was divided into two parts, the first pertaining to the influence of father as a model for business ownership, and the second pertaining to the influence of mother as a model for ownership. Both parts of the hypothesis were fully supported by the data. Owners in the study reported a significantly higher percentage of fathers who were owners than did either participating managers or secretaries. In addition, owners in the study reported a significantly higher percentage of mothers who were owners than did either participating managers or secretaries.

Hypothesis VI stated that women owners will have significantly more non-parental models than will managers or secretaries. This hypothesis was not supported by the data. The percentage of participating owners reporting non-parental models was not significantly different from the percentage of participating managers or secretaries reporting non-parental models. There are a number of possible reasons that this relationship did not achieve statistical significance. Perhaps the influence of non-parental models is, in general, much weaker than that of parental models. Another possibility is that non-parental models do have a significant impact on the choice of self-employment, but that only some categories of non-parental models have the impact. For example, ownership by relatives and close friends may
have an impact, but not ownership by a casual acquaintance. This possibility could be tested in future research.

It should be noted that results supporting the influence of occupational models also support the validity of the social learning theory of career decision-making (Krumboltz, Mitchell & Jones, 1976). This theory is relatively new and there has not been much empirical work available to confirm or disconfirm the relationships posited by the model. Therefore it is suggested that supportive results for Hypothesis V on parental models have importance beyond the scope of this study.

Hypothesis VII stated that for women owners, job satisfaction will be significantly related to achievement motivation, internality, BSRI "masculinity," and model availability in a positive linear fashion. The data did not support this hypothesis. In fact, none of the individual predictor variables closely approached a significant relationship with job satisfaction. An examination of the distribution of the dependent variable, job satisfaction, sheds some light on possible reasons for the lack of a relationship. The mean value for job satisfaction was 20.68, with a standard deviation of 2.00. Since the top possible value of this variable was 23.00, the actual results represent job satisfaction that is narrowly distributed and very high. Since the job satisfaction of the owners is relatively constant, it would be difficult or impossible to find any variable significantly related to job satisfaction. One possible reason for the high and stable job satisfaction of owners is the screening that occurs during the career choice process. Commitment
to business ownership is risky, and requires time, money and energy. It is conceivable that many persons who would be dissatisfied with business ownership choose some other career rather than pay the costs (monetary and otherwise) of entry. Perhaps, if the "dropouts" had continued on into ownership, a wider distribution of satisfaction would have been found, and a relationship of satisfaction to the predictor variables.

Hypothesis VIII stated that for women owners, success, as measured by tenure, will be significantly related to achievement motivation, internality, BSRI "masculinity," and model availability in a positive linear fashion. The data did not lend support to this hypothesis. The only individual predictor variable of potential interest was "Mother Ownership of Business," with a p < .01. One major difficulty with this hypothesis is probably the inadequacy of the tenure variable as a measure of success. Although, on the average, veteran business owners may be more effective than novice business owners, there may be very effective novice business owners whose effectiveness is not properly measured when tenure is used as a proxy for success. In that they measure individuals rather than groups, accounting data and observer ratings would seem to offer more appropriate measures of success than tenure. However, observer ratings are decidedly subjective, their value depending heavily on the training and ability of the raters (Cronbach, 1970). Accounting data seem to offer a very objective measure of success, but the flexibility of accounting standards lends a strong subjective element to accounting profits. Perhaps future research on
entrepreneurial success would benefit from a multivariate measure of success, such as a combination of tenure, observer ratings and accounting profits. The use of multiple measures of a variable when one measure is not adequate has precedent. In psychotherapy outcome research, multiple measures of outcome are quite common (Bergin & Lambert, 1978).

Hypothesis I through VIII investigated the relationship between a set of six psychological variables and:

1. Selection of business ownership as a career;
2. Job satisfaction of business owners; and
3. Success of business owners.

Hypothesis IX investigates a particular relationship between the same six variables and the job satisfaction of managers and secretaries. First, statistical analysis was performed to find out if the set of six variables successfully discriminated among the three groups of participants. A discriminant function analysis of the data revealed that, in general, the six variables tended to be related to group membership of the participants. In other words, the group of owners tends to have a characteristic cluster of values of the six variables; likewise, the managers' and secretaries' groups each have their own characteristic cluster of the six values. (The above analysis, incidentally, parallels the MANOVA of Hypothesis I, which also obtained significant results.) Since the first statistical analysis indicated that the set of six variables had significant discriminating power between the three groups, a second analysis, called a classification analysis, was performed on the data.
Although each group will tend to have its members clustered with respect to the six variables, there will be a number of members whose set of variables have non-typical values. For example, there will be a large number of managers whose values on the six variables will fall comfortably within the typical range for managers. However, there will also be a number of managers whose values will more closely resemble either those of the typical owner or secretary. Likewise, there will be secretaries whose set of six values do not resemble those of the typical secretary but rather those of a business owner or manager. Classification analysis assigns each case (participant) to a "most probable" group based on the case's set of six variable values in comparison to the three distributions of variable values for the three occupational groups.

Hypothesis IX investigated those secretaries and managers whose "most probable" group was business owner. Hypothesis IX stated that those managers and secretaries whose "most probable" group was business owner would exhibit significantly less job satisfaction than those managers and secretaries whose "most probable" group was equivalent to their actual membership group.

For managers the data did not support the hypothesis. Managers whose "most probable" group was business owner had an average job satisfaction that was virtually identical to that of managers whose "most probable" group was manager. A knowledge of the differences between owners and managers helps to understand the above results. Hypotheses II through VI investigated the possible differences
between women owners and managers. Of the variables investigated, it appeared that only the availability of parental models distinguished the owners from the managers. Variables that were related to the participants' personalities rather than their early environments did not seem to distinguish between owners and managers. Thus, an "owner-like" manager (one whose most probable group is business owner) would not be expected to experience any disharmony between her personality and her occupation. Consequently, there would be no decrement in job satisfaction expected as a result of placement in a management position.

The part of Hypothesis IX pertaining to secretaries could not be tested because there were so few secretaries whose "most probable" group was owner. Of the three groups, the secretaries had the largest number of participants whose "most probable" and actual groups were identical. Consequently, there were few group deviants available for study. This hypothesis could be tested in the future provided that a larger number of participants per cell are available.

Implications for Future Research

The results of the present study raise additional research questions. Perhaps future research will investigate some of the following issues.

The BSRI demonstrated some usefulness in discriminating between occupational groups in the present study. Additional studies are needed to explore the value of sex-role variables in explaining variations in occupational choice. Future research
should explore the importance of sex-role variables not only for females but also for males. Also, exploratory studies are needed to see whether the "feminine" sex-role scale of the BSRI has any importance in explaining occupational choice.

The present study did not find any personality variables that discriminated between female owners and managers. The only difference appeared to be availability of parental models. Future research should continue the search for personality variables that distinguish female owners from managers. Such variables may exist.

Additional research on the influence of models in business ownership may prove worthwhile. The present study categorized models as "parental - father," "parental - mother," and "other." The "other" category was probably too broad, and future research should break-up the category into sub-categories. Categories consisting of relatives, friends and fellow-workers and sub-categories of these classes might be useful.

Much more needs to be known about success in female business ownership. The present study did not find a relationship between a set of psychological variables and one measure of success. However, one individual variable, mother's business ownership, appeared to be related to success. Future studies should investigate other psychological variables and other measures of success. Investigation of the importance of ability in success seems indicated.

Finally, the present study was directed at finding the main effects of certain variables which may influence occupational choice, satisfaction and success. Future research should examine
some of the interactions between the variables. An example of this approach is provided by Borland's (1975) study of male business students' desires and expectations of starting a business. Borland (1975) found that there were some significant interactions between achievement motivation and locus of control in their influence on expectation and desire of starting a business.

**Implications for Counseling**

Some of the results of this study have possible applications to counseling practice. This section will discuss some of these applications.

Certainly an awareness of the high level of job satisfaction among female business owners in this study should make counselors more aware of entrepreneurship as a career option for women. Demarest (1977) also found that women owners tended to be very satisfied with their career choice. In the event that a counselor has any bias in favor of employment over ownership, the results of these two studies offer some countervailing evidence.

The ability of the BSRI "masculinity" scale to discriminate between certain occupations suggests that the scale may have some usefulness as an assessment device in counseling practice. However, the BSRI is a relatively new instrument that has received little use in an applied setting. Consequently, it should be used very cautiously until its value in an applied setting is established.

In the present study, the owner and manager groups appeared to be similar on a number of psychological dimensions. This suggests that the counselor could treat these occupations as similar
options in discussions with clients. For example, if a client were to mention either management or ownership as a possible vocational goal, the counselor could alert the client to the other member of the pair as a possibility to be considered.

The present study found that there was a significant relationship between the choice of business ownership and availability of parental models of ownership. It is important that a counselor be aware and sensitive to the importance of models for business ownership. Otherwise the counselor may be impatient or feel frustrated with the client's reluctance to consider the ownership option.

**Limitations**

The present study has a number of limitations which may influence the validity of the results. These limitations are discussed in this section.

In this study differences in psychological variables (e.g., achievement motivation) have been attributed to differences in occupational group membership. However, one cannot rule out the possibility that extraneous variables may be responsible for differences in the psychological variables. To guard against this possibility, two potential extraneous variables, age and education, were considered in the statistical calculations and did not appear to influence the results. However, there is still the possibility that some unanticipated extraneous variables influenced the results.

The participants in this study were, to some extent, a biased sample. They were cooperating members of business and professional
organizations. The degree of their resemblance to a random sample of women owners, managers and secretaries is not known.

In the present study it was assumed that differences in occupational choice were influenced by differences in psychological variables. Because of the cross-sectional nature of this study, no other possibilities could be investigated. However, in the context of a longitudinal study, it might be fruitful to study the influence of occupational choice on achievement motivation, locus of control and sex-role "masculinity."

An additional limitation in the present study was the choice of instrumentation. Achievement motivation, locus of control, and sex-role orientation can all be measured with alternative instruments. Two instruments to measure a given variable are not exactly equivalent. Consequently it is possible that somewhat different results would have been obtained with a different choice of instrumentation.

The variables in this study were assessed by self-report measures. As an alternative, some variables, such as achievement motivation, could have been measured by observation or performance test. Different results might have been obtained with the different measurement approaches.

Time limitations and financial considerations limited the number of comparison groups in the study. It would be desirable to compare entrepreneurs to additional occupational groups in order to enhance the generalizability of the findings.
One final limitation concerns the accuracy of the placement of participants into occupational groups. An in-depth interview would have been desirable in order to assure that an individual was actually performing the role-behaviors implied by her job title. Because of the large number of subjects, individual interviews were not possible. Placement of participants into groups was made on the basis of job title and a few additional screening criteria discussed in Chapter 3. Occasional placement errors may have influenced the results of the study.

Impact of Present Study on Literature

This section is intended to assess the extent to which the present study supports, challenges, or otherwise affects the body of literature on women's business ownership. First, there is a discussion of some findings which seem to extend the literature on male ownership to females. Then the relationship of the present study to the literature on female ownership is considered.

In the literature on male ownership, achievement motivation, locus of control, and parental models of ownership appeared to contribute to the choice of self-employment. The present study suggests that these variables also influence choice of ownership for women. The present study, however, found only modest support for the importance of these variables after the commitment to ownership is made. Aside from some apparent impact of mother's business ownership on success, the variables considered did not seem to influence the success or satisfaction of women business owners. The present study gave some qualified support to McClelland's (1961) assumption that both owners and managers are "entrepreneurs." In the present study,
owners and managers did not differ significantly on achievement motivation, locus of control and sex-role "masculinity." The only significant difference found between female owners and managers was the owners' tendency to have more parental models for ownership than did managers.

The present study appeared to support some of the findings in the literature on self-employed women. Demarest (1977) had speculated that the "masculine" sex-role variable would be related to female ownership, and the findings of the present study supported that speculation. Demarest's (1977) participants appeared very satisfied with self-employment, and reported reluctance to ever again become an employee. The present study found some of the same reluctance. Demarest's (1977) owners appeared to be able to coordinate their family lives with their business lives. There were similar findings in the present study in that a high percentage of the owners were married and/or raising children. One respect in which Demarest's (1977) sample differed from that of the present study was profitability of the firms. Owners in the present study appeared to be enjoying a higher rate of profit from their businesses than did the owners in Demarest's (1977) study. However, this difference should be viewed with some caution because some portion of the difference may be a result of:

(1) Differences in accounting methods between the two groups; and

(2) Inflation, which would tend to unfairly favor the incomes reported in the present study.
Finally, the results of the present study neither support nor challenge the findings of Pellegrino (1979) and Flexman (1980). The areas explored by Pellegrino (1979) and Flexman (1980) were rather different from those explored by the present study, making comparisons difficult.
Chapter 6

Summary

Introduction

Since World War II, women have constituted a growing percentage of the work force. In addition, they have experienced an increasing diversity of work roles. However, their wages continue to lag behind those of men. For some women, self-employment may offer a path to improved earnings and job satisfaction. Discussion of female self-employment has begun to appear in both the academic and popular literature. Demographic data on women owners has been assembled; their work attitudes have been assessed; their firms' formative and operating problems have been described. However, so far, little is known about what distinguishes owners from non-owners, what accounts for their choice of a self-employed career, and what factors explain success and satisfaction in self-employment.

Problem Statement

This study attempts to develop variables which predict choice, satisfaction and success in self-employment. In addition, the study assesses the relative job satisfaction of certain non-owners who, because of their psychological characteristics, appear to be better-suited for self-employment than they are for their present
In this study, three occupational groups are compared: owners, managers and secretaries. Owners could have been compared to many other occupational groups. Managers were chosen because there is some controversy about whether or not their personal characteristics and job activities are similar to those of owners. Secretaries were chosen for comparison for two reasons:

1. Secretaries constitute a relatively large percentage of business employment;
2. The large number of employment opportunities in this occupation attract a diverse population of workers.

Variables chosen for study are those that appear to have predictive power based on existing research on entrepreneurship.

Knowledge of the factors which contribute to choice, satisfaction and success in business ownership may have implications for diagnosis and treatment in counseling. Such knowledge may assist counselors in assessing the realism of their clients' vocational choices and may direct discussion to career paths that might otherwise be overlooked.

Subjects

Subjects were solicited from the ranks of business and professional groups. In order to qualify for inclusion, participants had to meet certain screening criteria. There were 47 participants in each occupational group.
Procedure
Subjects were mailed a packet of study materials and asked to complete the questionnaires and return them by mail.

Instrumentation
Achievement motivation was measured by the Mehrabian and Bank Achievement Questionnaire (Mehrabian & Bank, 1978). Locus of control was measured by the Internal - External Control Scale (Rotter, 1966). Sex-role "masculinity" was measured by the Bem Sex-Role Inventory (Bem, 1974). Job satisfaction was measured by the Brophy (1959) scale. All of the above instruments have demonstrated adequate validity and reliability for the purposes of the present study. Availability of models for ownership was assessed by direct questions that were a part of the demographic data section of the study materials given to participants.

Hypotheses
I. The following psychological variables:
   (1) Achievement motivation;
   (2) Locus of control;
   (3) Sex-role "masculinity;" and
   (4) Role-models for ownership - father, mother and other;
considered simultaneously, will discriminate between female owners, managers and secretaries.
II. The achievement motivation of women owners will not be different from that of women managers, but will be greater than that of women secretaries.
III. Women owners will be more internal on locus of control than
either managers or secretaries.

IV. Women owners will score higher on the BSRI "masculinity" scale than either managers or secretaries.

V. Women owners will have more parental models for ownership than managers or secretaries.

VI. Women owners will have more non-parental models for ownership than managers or secretaries.

VII. For women owners, job satisfaction will be related to achievement motivation, internality, "masculinity," and model availability in a positive linear fashion.

VIII. For women owners, success, as measured by tenure, will be related to achievement motivation, internality, "masculinity," and model availability in a positive linear fashion.

IX. All participants can be represented by their scores on six variables: Achievement motivation, locus of control, sex-role "masculinity," and models for ownership - father, mother and other. It is predicted that those managers whose variables more closely resemble those of owners than those of their own occupational group (managers) will experience less job satisfaction than those managers whose variables resemble those of their own group. In a similar fashion, it is predicted that secretaries whose variables more closely resemble owners' than secretaries' will experience less job satisfaction than secretaries whose variables resemble those of their own group.
Data Analysis

Hypothesis I predicts that a set of six variables, considered simultaneously, will distinguish between owners, managers and secretaries. Multivariate Analysis of Variance (MANOVA) was the statistical approach used to test the hypothesis; the Finn (1972) Multivariance computer program calculated the results. For Hypothesis II through VI, owners, managers and secretaries were compared pairwise on individual variables with the use of univariate analysis of variance (Hays, 1973). For Hypotheses VII and VIII, multiple linear regression (Hays, 1973) was used to test the prediction that six variables (achievement motivation, locus of control, sex-role "masculinity," and model availability - father, mother, and other), considered simultaneously, would predict the success and satisfaction of women owners. The calculations were carried out by the Finn (1972) computer program. For Hypothesis IX, managers and secretaries were classified into "most probable" groups with the classification analysis routine of the SPSS system (Nie et al, 1975). Job satisfactions for the two classifications of managers and secretaries were compared with the use of univariate analysis of variance (Hays, 1973).

Results

The six variables (achievement motivation, locus of control, sex-role "masculinity," and model availability - father, mother and other), considered simultaneously, appeared to discriminate between owners, managers and secretaries at a significant level. For achievement motivation, locus of control, and sex-role
"masculinity," taken as individual variables, there were no significant differences between the group of owners and the group of managers. However, in the comparison of owners with secretaries, the owners were significantly higher in achievement motivation, locus of control internality, and "masculine" sex-role. Owners exhibited significantly more parental models for ownership than did either of the other two groups. However, there was no significant difference between owners and the other two groups in the number of non-parental models. No significant relationship was found between the job satisfaction of owners and the set of six predictor variables. Likewise, no significant relationship was found between owners' success and the set of six predictor variables. However, one individual variable, business ownership by mother, appeared to be related to success. The two classes of managers ("most probable" groups of "manager" and "owner") did not exhibit a significant difference in job satisfaction. The two classes of secretaries were not compared on job satisfaction because of an inadequate amount of data.

Discussion

The findings of no significant differences between owners and managers on achievement motivation, locus of control, and sex-role "masculinity" provide qualified support for the view that ownership and management are similar activities and tend to attract similar kinds of workers. However, significant differences were found between owners and managers on availability of parental models for ownership. Thus owners and managers, because of their
family history, are likely to differ in attitudes and expectations regarding business ownership. Owners did not differ from managers or secretaries in the number of models for ownership who were not parents. This variable appears to be only a weak influence on the choice of self-employment. However, it is recommended that in the future the category "non-parental models" be broken-up into subcategories and the resulting variables retested separately. It should also be noted in passing that any support for the influence of models on ownership also provides support for the Social Learning Theory of Career Decision-Making (Krumboltz, Mitchell & Jones, 1976). Failure to find a significant relationship between owners' success and the set of six predictor variables was probably due to the difficulty of measuring the success variable. Tenure, or length of time in business, is not a completely satisfactory measure of success. No relationship was found between the job satisfaction of owners and the six predictor variables. The uniformly high level of job satisfaction among the owners made it difficult or impossible to find such a relationship. It should also be remembered that business ownership is risky, and those who would have been low in success or satisfaction may have been screened out before entry into business. Such screening reduces correlation coefficients. No significant difference in job satisfaction was found between those managers whose "most probable" group was "manager" and those managers whose "most probable" group was "owner." This result seems reasonable in light of the findings of no significant difference in the achievement motivation, locus of control, and sex-role "masculinity" of
managers and owners. Since owners and managers are quite similar in these major characteristics, an "owner-like" manager would not be expected to suffer any major distress as a result of incongruency. Consequently job satisfaction would not be affected.
Appendix A

Demographic Data Forms
Demographic Data Sheet for Owners

Today's Date ____________

Marital Status:

Single __ Divorced __ Separated __
Married __ Widowed __

Number of children living with you __________

Education:

Please circle highest grade completed:
Grade school: 1 2 3 4 5 6 7 8
High school: 1 2 3 4 Graduate? Yes No
College: 1 2 3 4 Graduate? Yes No
Graduate School: 1 2 3 4 5 Master's Degree? Yes No
Doctoral Degree? Yes No
Other training (Please specify)

________________________________________

________________________________________

________________________________________

Age _____

Please list as many of your father's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your father ever own his own business? Yes No

Please list as many of your mother's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your mother ever own her own business? Yes No
Please check if any of the following have owned businesses:

- Relatives besides father and mother
- Friends and acquaintances
- Work companions

List the previous types of work you have done:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Date your current business was formed __________

Are you self-supporting from your business?  Yes  No

Please briefly explain the type of business you are involved in:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Would you be willing to work for someone else again?

- Yes
- No
- Possibly (Please explain) ________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Average work week for your current business: _____ hrs/wk

What led you to establish your own business? __________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
Legal structure of your business:

- Sole Proprietorship
- Partnership
- Corporation
- Other (Please specify) ___________________________________________________________________

Gross Annual Receipts:
(most recent)

<table>
<thead>
<tr>
<th>Category</th>
<th>$0 to $4,999</th>
<th>$5,000 to $9,999</th>
<th>$10,000 to $24,999</th>
<th>$25,000 to $49,999</th>
<th>$50,000 to $99,999</th>
<th>$100,000 to $199,999</th>
<th>Over $500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$5,000 to $9,999</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10,000 to $24,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Net Annual Income:
(most recent)

<table>
<thead>
<tr>
<th>Category</th>
<th>$0 to $4,999</th>
<th>$10,000 to $24,999</th>
<th>Over $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0 to $4,999</td>
<td></td>
<td></td>
<td>Over $50,000</td>
</tr>
</tbody>
</table>

Number of employees:

- Volunteers only  __ 1 to 4    20 to 49
- No employees     __ 5 to 9    50 to 99
- Less than one*   __ 10 to 19  100 or more

* Part-time or temporary.

Number of employees related to owner:

Estimated average number of stockholders for recent month (if applicable):

Estimated average number of owners/investors for recent month:

City or town in which your business is located:

Percent of the business which you own:

Amount of decision-making responsibility in the business:
(please check one)

- I make all of the important decisions.
- I make most of the important decisions.
- I make some of the important decisions, about half.
- I make a few of the important decisions.
- I make none of the important decisions.
Demographic Data Sheet
for Managers

Today's Date: _______________

City or town in which you work: _______________

Job title: ________________________________

Marital Status:

- Single
- Divorced
- Separated
- Married
- Widowed

Education:

Please circle highest grade completed:
- Grade school: 1 2 3 4 5 6 7 8
- High school: 1 2 3 4 Graduate? Yes No
- College: 1 2 3 4 Graduate? Yes No
- Graduate school: 1 2 3 4 5 Master's Degree? Yes No
- Doctoral Degree? Yes No

Other training (Please specify)

________________________________________

________________________________________

________________________________________

Age ______

Please list as many of your father's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your father ever own a business? Yes No

Please list as many of your mother's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your mother ever own a business? Yes No
Please check if any of the following have owned their own businesses:

- Relatives besides father and mother
- Friends and acquaintances
- Work companions

Average work week for your current occupation: _____ hrs/wk

Your annual salary:

- Under $5,000
- $5,000 to $9,999
- $10,000 to $14,999
- $15,000 to $19,999
- $20,000 to $24,999
- $25,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $69,999
- $70,000 to $99,999
- $100,000
- Over $100,000

Number of subordinates reporting directly to you: _____

Number of subordinates reporting to you, both directly and indirectly: _____
Demographic Data Sheet
for Secretaries

Today's Date ____________

City or town in which you work ________________________________

Job title ________________________________

Marital status:

Single  Divorced  Separated
Married  Widowed

Education:

Please circle highest grade completed:
Grade school: 1 2 3 4 5 6 7 8
High school: 1 2 3 4 Graduate? Yes No
College: 1 2 3 4 Graduate? Yes No
Graduate school: 1 2 3 4 5 Master's Degree: Yes No
Doctoral Degree: Yes No
Other training (Please specify)

Age ______

Please list as many of your father's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your father ever own a business? Yes No

Please list as many of your mother's occupations as you can recall:

________________________________________

________________________________________

________________________________________

Did your mother ever own a business? Yes No
Please check if any of the following have owned their own businesses:

- Relatives besides father and mother
- Friends and acquaintances
- Work companions

Average work week for your current occupation: ____ hrs/week

Your annual salary:

- Under $5,000
- $5,000 to $9,999
- $10,000 to $14,999
- $15,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $100,000
- Over $100,000
Appendix B

Inventories
Work Attitude Questionnaire

Please use the following scale to indicate the degree of your agreement or disagreement with each of the statements on the following pages.

Record your answers in the spaces provided below.

+4 = very strong agreement
+3 = strong agreement
+2 = moderate agreement
+1 = slight agreement
0 = neither agreement nor disagreement
-1 = slight disagreement
-2 = moderate disagreement
-3 = strong disagreement
-4 = very strong disagreement

1. ___ 9. ___ 17. ___ 25. ___ 33. ___
2. ___ 10. ___ 18. ___ 26. ___ 34. ___
3. ___ 11. ___ 19. ___ 27. ___ 35. ___
4. ___ 12. ___ 20. ___ 28. ___ 36. ___
5. ___ 13. ___ 21. ___ 29. ___ 37. ___
6. ___ 14. ___ 22. ___ 30. ___ 38. ___
7. ___ 15. ___ 23. ___ 31. ___
8. ___ 16. ___ 24. ___ 32. ___
1. I usually end up carrying out the things I plan at work.

2. I have difficulty working in a new and unfamiliar situation.

3. I am very optimistic about my work career.

4. I don’t usually tackle problems that others have found to be difficult.

5. I am hesitant about making important decisions at work.

6. The idea of struggling my way to the top does not appeal to me.

7. I would prefer a job which is important, difficult, and involves a 50% chance of failure to a job which is somewhat important but not difficult.

8. I am usually tempted to take on more responsibilities than a job originally entails.

9. The thought of having to take on a new job would bother me.

10. I find it especially satisfying to complete an important job that required a lot of effort.

11. I don’t work well under pressure.

12. I believe that if I try hard enough, I will be able to reach my goals in life.

13. I take pride in my work.

14. Learning new skills doesn’t excite me very much.

15. I only work as hard as I have to.

16. I tend to set very difficult goals for myself.

17. I like tasks that require little effort once I’ve learned them.

18. I am ambitious.

19. I prefer small daily projects to long-term ones.

20. I really enjoy a job that involves overcoming obstacles.

21. I appreciate opportunities to discover my own strengths and weaknesses.

22. I find little satisfaction in working hard.

23. These days, I see little chance for promotion on the job unless a person gets a break.
24. Solving a simple problem is not as satisfying to me as trying a difficult one.

25. I prefer a job which requires original thinking.

26. I like a job which doesn't require my making risky decisions.

27. I only work because I have to.

28. I often succeed in reaching important goals I've set for myself.

29. I feel relief rather than satisfaction when I have finally completed a difficult task.

30. I perform best in competitive situations.

31. Constant work toward goals is not my idea of a rewarding life.

32. I more often attempt difficult tasks that I am not sure I can do than easier tasks I believe I can do.

33. I am not satisfied unless I excel in my work.

34. I don't like to have the responsibility of handling a difficult situation.

35. I prefer my work to be filled with challenging tasks.

36. When I do a job, I set high standards for myself regardless of what others do.

37. I try to anticipate and avoid situations where there is a moderate chance of failure.

38. I would rather do something at which I feel confident and relaxed than something which is challenging and difficult.
Opinion Questionnaire

Please circle the letter (a or b), for each of the following questions, which best describes how you feel.

1. a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.

2. a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard she tries.

5. a. The idea that teachers are unfair to students is nonsense.
   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you.
   b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality.
   b. It is one's experiences in life which determine what she's like.

9. a. I have often found that what is going to happen will happen.
   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.

b. Getting a good job depends mainly on being in the right place at the right time.

12. a. The average citizen can have an influence in government decisions.

b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. a. When I make plans, I am almost certain that I can make them work.

b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. a. There are certain people who are just no good.

b. There is some good in everybody.

15. a. In my case getting what I want has little or nothing to do with luck.

b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.

b. By taking an active part in political and social affairs the people can control world events.

18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

b. There really is no such thing as "luck."

19. a. One should always be willing to admit mistakes.

b. It is usually best to cover up one's mistakes.

20. a. It is hard to know whether or not a person really likes you.

b. How many friends you have depends upon how nice a person you are.
21. a. In the long run the bad things that happen to us are balanced by the good ones.
   b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.
   b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how my teachers arrived at the grades they gave.
   b. There is a direct connection between how hard I studied and the grades I got.

24. a. A good leader expects people to decide for themselves what they should do.
   b. A good leader makes it clear to everybody what their jobs are.

25. a. Many times I feel that I have little influence over the things that happen to me.
   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.
   b. There's not much use in trying too hard to please people; if they like you, they like you.

27. a. There is too much emphasis on athletics in high school.
   b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing.
   b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I don't understand why politicians behave the way they do.
   b. In the long run the people are responsible for bad government on a national as well as on a local level.
The three questions on this sheet ask how satisfied you are with your job. Choose the answer that tells best how you feel about your position, and put a check in front of it. Please think about your specific position and your feelings about it for the past two months.

1. Which of the following statements comes closest to how you feel about your job?
   - I like it extremely well.
   - I like it very much.
   - I like it fairly well.
   - I like it just a little.
   - I neither like it nor dislike it.
   - I dislike it some.
   - I dislike it quite a lot.
   - I dislike it very much.
   - I hate it.

2. If you compare yourself with others of the same sex and age, how would you rate your overall feelings of satisfaction or dissatisfaction with your job?
   - Among the most satisfied of all.
   - Far more satisfied than the great majority of people.
   - Somewhat more satisfied than the general run of people.
   - About average.
   - Somewhat less satisfied than the general run of people.
   - Much less satisfied than the great majority of people.
   - Among the most dissatisfied of all.

3. How much of the time do you feel satisfied with your job?
   - All of the time.
   - Most of the time.
   - A good deal of the time.
   - About half of the time.
   - Occasionally.
   - Seldom.
   - Never.
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