

A COMPARISON OF THE ORIGINS AND  
ORIENTATIONS OF TRUE ENTREPRENEURS,  
OTHER OWNERS, AND  
BUSINESS HIERARCHS

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## ABSTRACT

### A COMPARISON OF THE ORIGINS AND ORIENTATIONS OF TRUE ENTREPRENEURS, OTHER OWNERS, AND BUSINESS HIERARCHS

by Neil Gerald Soslow

The purposes of this study were: (1) to extend the entrepreneurial studies of Orvis F. Collins and David G. Moore through the verification of some of their results in another context, using different research techniques; and (2) to directly compare the "true entrepreneur" (an individual who creates a business where none previously existed), the "other owner" (an individual who becomes a business owner through inheritance or the purchase of an existing organization), and the "business hierarch" (an individual who seeks occupational success by climbing the hierarchical ladder of an existing organization).

The hypotheses tested were: true entrepreneurs have a greater tendency than the other groups to be either foreign-born or to have been born geographically near their present residence; true entrepreneurs tend to come from a lower socioeconomic background than the other respondents; true entrepreneurs tend to have had relatively unhappy childhoods; true entrepreneurs have a tendency to be less well-educated than the other respondents; those entrepreneurs with military experience tend to have had less service mobility; true entrepreneurs tend to be characterized by a high rate of inter-firm movement; true entrepreneurs have a tendency to work sporadically and to find work more fatiguing and less

enjoyable; and true entrepreneurs tend to be more authoritarian than the other respondents.

Three-hundred-three useable mailed questionnaire responses were obtained from a chamber of commerce industrial directory and a professional engineering society listing. The net responses were 33 percent and 53 percent respectively. The three test groups consisted of 113 true entrepreneurs, 80 other owners, and 110 business hierarchs. The three groups were homogeneous with regard to sex, age, and marital status. The two business owner groups were homogeneous with regard to a number of aspects of their business organizations.

The findings indicated that one in eight of the true entrepreneurs was foreign-born which was significantly greater than that found for the other groups. The true entrepreneurs also appeared to be more "home-grown" than the business hierarchs, but the other owners were significantly more "home-grown" than both groups. The effect of inheritance and purchase from relatives appears to be the major reason for this.

The socioeconomic background of the true entrepreneurs, as measured by fathers' education and fathers' occupation, was significantly lower than the backgrounds of the other groups. The business hierarchs came from the highest backgrounds. Almost half of the other owners' fathers had been small business owners.

The true entrepreneurs came from significantly larger families of orientation than the other groups. The differences in the respondents'



perceived evaluations of their childhood life and experiences were, in most cases, not significant.

The true entrepreneurs attained a significantly lower educational level than the other groups. The business hierarchs were the best educated. Seventy-seven percent of the business hierarchs graduated from college compared with 38 percent of the other owners and 28 percent of the true entrepreneurs. This educational difference was reflected in attitudes toward formal education. The business hierarchs felt that school was the most important source of knowledge while the true entrepreneurs regarded personal experience as most important.

No significant differences were found among the groups concerning mobility in the armed services.

The true entrepreneurs changed jobs significantly more during their occupational careers than the other respondents. One third of the true entrepreneurs had worked for five or more firms compared with 14 percent of the other owners and 11 percent of the business hierarchs.

An investigation of orientations toward work generally produced no significant differences among the groups.

The true entrepreneurs were found to be significantly more authoritarian than the business hierarchs. The other owners proved to be almost as authoritarian as the true entrepreneurs.

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By

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## **PART I**

### **THE RESEARCH METHODOLOGY**

## CHAPTER I

### INTRODUCTION

The purpose of this study is to add to the body of knowledge concerning the entrepreneur. The research was planned to contribute to this knowledge by (1) extending the entrepreneurial studies of Orvis F. Collins and David G. Moore through the verification of some of their results in another context, using different research techniques; and (2) directly comparing the "true entrepreneur" with the "other owner" and the "business hierarch" in the industrial sector of our economy.

There are three ways in which an individual can become the owner of a business firm: he can start a new business; he can purchase an existing business; or he can inherit an existing business.

The "true entrepreneur" is an individual who creates a business where none previously existed.<sup>1</sup> The individual who purchases or inherits an existing business can be called an "other owner." The "business hierarch" is an individual who seeks occupational success by climbing the hierarchical ladder of an existing organization.

The literature has been filled with studies of business hierarchs.<sup>2</sup> There has been very little empirical investigation of the

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<sup>1</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 20.

<sup>2</sup>See Chapter 9, ibid., for a detailed review of the business hierarch literature.

entrepreneur in this country<sup>3</sup> and, to our knowledge, there has never been an attempt to quantitatively compare business hierarchs and entrepreneurs.

### Studies of the Entrepreneur

Biographies of successful entrepreneurs such as Henry Ford, Andrew Carnegie, and John D. Rockefeller are numerous. But the "successful" entrepreneur in this sense of the word is not necessarily the typical entrepreneur. Furthermore, such studies are historical and may or may not mean very much with regard to the present.<sup>4</sup>

In a study of "sole owners, all partners, and resident presidents,"<sup>5</sup> Professor Mabel Newcomer investigated 5,368 proprietors in Poughkeepsie, New York. Her sample included respondents from manufacturing, wholesaling, retailing, and service units. The Newcomer study is

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<sup>3</sup>There have been several studies of entrepreneurs in other countries. One noteworthy study was reported by Father John J. Carroll in The Filipino Manufacturing Entrepreneur. Father Carroll also summarizes the results of entrepreneurial research which has been conducted by others in Lebanon, Turkey, India, Pakistan, and Puerto Rico.

<sup>4</sup>In 1948 the Research Center in Entrepreneurial History was created at Harvard University. The Center was established not only to encourage inquiry into entrepreneurial history but more fundamentally to revitalize the entire field of economic history. Areas of specific interest to researchers at the Institute are: (1) entrepreneurship; (2) the economic role of government; (3) the development of corporations; and (4) the history of American banking. The emerging definition of entrepreneurship has viewed the activity more in terms of the characteristics of a firm rather than in terms of a single person. Individual backgrounds and personalities are relevant only to the degree to which they throw light on the behavior of the firm. The studies of the Center have largely been of single companies or industries. For a review of the Center's early history, see Hugh G. J. Aitken, "The Future of Entrepreneurial Research," Explorations in Entrepreneurial History, 2nd Series, I (Fall 1963), pp. 3-9.

<sup>5</sup>Mabel Newcomer, "The Little Businessman: A Study of Business Proprietors in Poughkeepsie, New York," Business History Review, Vol. 35, Winter 1961, p. 478.

not a study of entrepreneurs exclusively. All three groups which will be compared in the present study were included in the Newcomer sample. Unfortunately, in the Newcomer research they were studied as separate groups and not as identifiable sub-groups. Her study is mentioned here because it was the first quantitative attempt to understand the entrepreneur and to prove or disprove some of the conventional assumptions which have surrounded him. The emphasis of the research was on the origins and job histories of the respondents. Some of the social background data will be discussed later in an analysis of data from the present study.

Only two empirical studies of the entrepreneur are known. Both have been sponsored by the Small Business Administration. One study, directed by Professors Kurt B. Mayer and Sidney Goldstein investigated eighty-one retail and service firms in the Providence, Rhode Island area. The research focused on the problems of survival during the first two years of a firm's existence. Although some attention was given to the backgrounds and occupational histories of the respondents, the major emphasis was on the observation and collection of data pertaining to business abilities and the causes of success or failure.<sup>6</sup>

The other study was conducted by Professors Orvis F. Collins and David G. Moore. This study of 150 manufacturing entrepreneurs in the State of Michigan represents the first behavioral study of the social and psychological backgrounds of men who start their own businesses. The study employed depth interviews and the projective Thematic Apperception

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<sup>6</sup>Kurt B. Mayer and Sidney Goldstein, The First Two Years: Problems of Small Firm Growth and Survival, Small Business Research Series, No. 2 (Washington: U.S. Government Printing Office, 1961), pp. 8-16.

Test. The emphasis of their study is described by the researchers:

We were interested in the structure of entrepreneurial activities, the demands it made on the entrepreneurial role in our society, and the way in which the entrepreneur interpreted and met the demands made upon him. We were interested also in the constellation of values, attitudes, and beliefs found among entrepreneurs, and in assessing whether entrepreneurial activities tended to attract individuals of particular character-formations or whether the role itself shaped values. In addition, we were interested in the psychodynamics of the successful entrepreneur and especially in the relation of his personality and need structure to the demands of the entrepreneurial role. Finally, we were interested in the social origins of entrepreneurs and the influence of early family experiences and occupational careers on their subsequent patterns of behavior.<sup>7</sup>

Collins and Moore have given us a picture of the entrepreneur as an individual who is marginal to large-scale industry. At the sociological level, he does not have the proper credentials to be a successful business hierarch. He lacks the education, breeding, social contacts, and experiences which characterize the hierarch climber.

At the psychological level, the TAT stories showed that "the social value system characteristic of the entrepreneur is steeped in middle class mores, the 'American Way,' the Protestant Ethic."<sup>8</sup> Other psychological findings were:

1. Lack of social mobility drives.--"The value of 'getting ahead,' rising in a social hierarchy, and achieving positions of authority and rewards associated with power and status"<sup>9</sup> were generally lacking.
2. Punishing pursuit of tasks and chronic fatigue.--The entrepreneur tends to drive himself hard to the point of over-

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<sup>7</sup>Collins and Moore, op. cit., p. 22.

<sup>8</sup>Ibid., p. 59.    <sup>9</sup>Ibid., p. 60.



expending and punishing himself. His work is sometimes sporadic with periods of great activity followed by guilt-inducing rest. Although devoted to his work, he does not "love" it and does not, typically, know how to enjoy the fruits of his labors. "The result is that the entrepreneur is left with a feeling of never being quite able to reach any satisfactorily definable and rewarding goal."<sup>10</sup>

3. Lack of problem resolution.--The entrepreneur avoids bringing the problem and the correct solution together to effect a resolution. "The entrepreneur tends to perceive the world in rather simple terms of irreconcilable dichotomies--black or white, good or evil, mind or body, dominant or submissive, work or enjoyment, total abstinence or total abandon. A golden mean between these posited extremes is not commonly known to the entrepreneur."<sup>11</sup>
4. The relations of the entrepreneur with subordinates.--These relations are satisfactory when the entrepreneur views himself in a paternal role. Often, however, the entrepreneur sees his subordinates "entertaining the sloth, lechery, rebelliousness, and similar 'vices' that the entrepreneur resists within himself. This suggests that the labor relations prevailing in the entrepreneur's plant might tend to be extremely good or bad (and/or mercurial), depending on whether employees are perceived as the embodiment of 'good' or 'bad' aspects of the entrepreneurial self."<sup>12</sup>

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<sup>10</sup>Ibid., p. 61.

<sup>11</sup>Ibid., p. 62.

<sup>12</sup>Ibid.

5. Peer relations and partners.--These appear to be the least strained but such relations may be viewed as being on the verge of turning into a superior-subordinate relationship. "This suggests that the entrepreneur is not only a man who needs to break away from a larger organization in order to establish an independent business, but also a man who would have difficulty entering into a successful partnership in business. A need to dominate or fear of domination would tend to make the 'partnership' an unstable one."<sup>13</sup>
6. Relations to authority.--"Superordinate relations are the least effective and affective of all entrepreneurial interpersonal relationships."<sup>14</sup> The entrepreneur "is characterized by an unwillingness to 'submit' to authority, an inability to work with it, and a consequent need to escape from it."<sup>15</sup> They exhibit great need for autonomy which is not necessarily fulfilled by owning a business.

#### The Dimensions of the Study

From the time that the present study was first conceived, the intent was to limit the investigation to those areas which could be explored through the use of a mailed questionnaire. Many of the findings of Collins and Moore described above are very difficult to measure and require the use of projective techniques and depth interviews. For this reason, only

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<sup>13</sup>Ibid., p. 63.

<sup>14</sup>Ibid.

<sup>15</sup>Ibid., p. 64.

certain areas could be selected for coverage. These areas are: social origins, educational achievements, military experiences, and work orientations.

The following specific hypotheses posed mainly by Collins and Moore were investigated in detail:

1. True entrepreneurs have a greater tendency than the other groups to be either foreign-born or to have been born geographically near their present residence.
2. True entrepreneurs tend to come from a lower socioeconomic background as measured by fathers' education and fathers' occupations.
3. True entrepreneurs tend to have had an unhappy childhood which was manifested in terms of economic hardships, broken homes, and strained parental relations.
4. True entrepreneurs have a tendency to be less well-educated than our other respondents and to view formal education in rather pragmatic terms.
5. Those entrepreneurs having had military experience tend to have demonstrated less service mobility than the other groups.
6. True entrepreneurs tend to have experienced greater inter-firm movement during their occupational careers than the other respondents.
7. True entrepreneurs have a tendency to work more sporadically and find work more fatiguing and less enjoyable than the other groups.

8. True entrepreneurs tend to be more authoritarian than the other respondents.

Chapter II will discuss the research design which was used to test the above hypotheses. Chapter III will cover the selection and responses of the research samples as well as an initial look at the three groups.

Part II (Chapters IV through VII) will contain documented sources of the stated hypotheses and analyses of the research findings.

Part III will include a summary of the findings, significant conclusions, limitations of the study, and suggestions for further research.

## CHAPTER II

### THE RESEARCH DESIGN

#### Attempts to Develop a Testing Instrument

Personal background information and attitudinal data were needed to test the hypotheses posed in Chapter I. Social background data can easily be obtained from a mailed questionnaire but attitudinal and value data are more reliably derived from depth interviews or psychological tests.

One of the original purposes of this research was to attempt to develop a paper-and-pencil test which would identify entrepreneurs from other businessmen. Two false starts were made before the final form of the questionnaire emerged: (1) a series of statements and (2) a series of anecdotes.

Reactions to selected statements.--The first attempt was to develop nearly two-hundred Likert-type statements such as: "I feel suspicious of someone who really enjoys his work"; "I work hardest with the best results when I am under the pressure of time"; and "I look back on my childhood as being a happy time of my life." Respondents were to be asked to react to each statement on a 3-point or 5-point scale ranging from agreement to disagreement. Preliminary testing, however, showed that such statements seemed to elicit responses that respondents thought were expected of them. At this point the anecdotal method was found and the selected statements method was dropped.

The anecdotal method.--Alfred Winslow Jones feared that respondents to his study of attitudes toward corporate property in Akron, Ohio in the late thirties would not be able to identify with the subject or would give predisposed answers. His solution was to develop a series of anecdotes which described actual events. Following each anecdote, the respondent was asked to indicate whether he approved or disapproved of whatever action had been taken. The rationale for this approach is quoted below:

To have asked the respondents directly about their attitudes toward anything so general, so common, so apparently permanent as corporate property rights would have been like asking them for their attitude toward three-dimensional space. Some persons--socialists and others--have already made up their minds about corporate property rights and elect to oppose them in favor of a general systemic alternative, namely, nationalization of such property, or "collective ownership." For the great majority this general concept is either too remote to be understandable, or implies an intolerable disturbance in the accepted ways of doing things, and is rejected.

It would have been equally useless to set up a series of questions about corporate property rights in general as against personal rights in general and ask directly which seemed the more valuable. Either the same bewilderment would have ensued, or else personal rights would have been somewhat irresponsibly chosen because of a more favorable feeling about the mere expression.

It was necessary therefore to choose these concrete story situations in which there has been a clash of interests and about which we may expect a division of opinion. Naturally, in the last analysis the person being interviewed is reacting merely in words--to the verbal description of the event. But the telling of a simple narrative is only one step removed from reality itself, and whether we like it or not, we must work with words. If generalization or abstraction can ever validly be made, we can say that, in the question we put to [the interviewees] at the end of each story, we are--so to speak--asking [them] to hold corporate property rights in one hand and some sort of "personal" rights in the other. The answer indicates which weighs the heavier in each case. This is not to say that the symbol "corporate property" must come into [their] mind on hearing each story. The evidence throughout our interviewing was to the effect that people seldom think of corporate property as a separate form of property in general, but in each of our stories corporate property rights, as we have defined them (that is, the right of management to dispose of the property of the company), is involved. Whether [they] knew it or not, [they were] sitting in judgment

on corporate property. This was no less the fact because [they were] judging complex situations in which various other stereotypes (law and order, violence, and the like) can be found. High order abstractions like "corporate property" never occur in isolation in the real world, and if we want to present our respondents with important real situations that have actually occurred, we were bound to present them with stories such as these.<sup>1</sup>

Each of Jones's anecdotes described "a struggle or an antagonism in which one of the sides is working to protect the interests of corporate property and the other side to gain an advantage, or avert an evil, of a simple, personal nature."<sup>2</sup> At the end of each story, the respondent was asked a question such as "What do you think of the action taken?" Following the question were five choices which Jones scored from 0 to 4. A typical range of choices was:

- 0. I approve
- 1. I approve, but with qualifications
- 2. I cannot decide
- 3. I disapprove, but with qualifications
- 4. I disapprove

In scoring the answers, Jones required a valid explanation before a score of 1 or 3 was given. Essentially, then, the answer to each question was rated 0, 2, or 4. Jones used seven of these anecdotes in his study and supplemented them with questions concerning the respondents' background.

Jones tested the reliability of his instrument by the split-half method on a random group of one-hundred persons. Using the Spearman-Bowman prophecy formula, he found a reliability coefficient of .79. No mention was made of the validity of the test.<sup>3</sup>

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<sup>1</sup>Alfred Winslow Jones, Life, Liberty, and Property (Philadelphia: J. B. Lippincott Co., 1941), pp. 155-156.

<sup>2</sup>Ibid., p. 51.

<sup>3</sup>Ibid., p. 369.

A modification of the Jones approach was attempted for this study. Fifteen stories pertaining to business situations were developed. Each story presented a situation involving conflict of interests but no solution was presented. An attempt was made to prepare five solutions following each of the anecdotes that ranged from strongly entrepreneurial to strongly bureaucratic. The respondent, in effect, was asked, "What would you do in this situation?"

These fifteen stories along with some questions concerning respondents' personal background were then used in a pre-test. The questionnaire was administered to two groups of participants attending adult education seminars at the New York State School of Industrial and Labor Relations, Cornell University. One group consisted of sixty-five persons attending a seminar for union officials (including shop stewards) of the United Steelworkers. Participation was voluntary and approximately 25 percent took part. The other group consisted of sixteen men and women attending a conference on industrial training techniques. The participants were training directors, personnel directors, or assistant personnel directors from some of the larger corporations in the country. The questionnaire was administered to this group as a class exercise. The respondents were not told what the questionnaire was testing but merely that it was part of a social research project. Everyone participating in the pre-test was encouraged to comment on the questionnaire.

The comments offered by the respondents were more useful than the answers to the stories. Although some differences in the answers did exist, the sample was too small to be very meaningful. A few comments concerned ambiguities or unrealistic occurrences in the stories them-



selves. This was relatively easy to correct. The majority of the comments, however, concerned the five choices at the end of each story.

A further scrutiny of the stories and the comments revealed several points. First, it was difficult to develop five "good" solutions to each story. Second, and more importantly, it was difficult to gradate these stories along a continuum ranging from entrepreneurial to bureaucratic behavior. Third, differing interpretations could, in some cases, result in widely differing responses exclusive of entrepreneurial or bureaucratic behavior. Fourth, the stories themselves needed considerable rewriting in order to more clearly delineate the problem situation.

For these reasons, six of the short stories were selected and completely renovated. Each story was developed to reflect a complex, yet logical, decision situation. Then the principal character in each story "decided" upon a course of action. The decision was designed to be either entrepreneurial or bureaucratic in nature. The respondent could then be asked for his reaction to the decision. The strength of his agreement or disagreement could be measured on a scale such as the following:

1. I strongly agree
2. I agree
3. I can't decide
4. I disagree
5. I strongly disagree

Each story attempted to test the respondent's values in a given hypothetical situation. Some of the factors included were loyalty to an organization, friendship, sponsorship, self-interest, economic gain, ability to break ties, following orders, security, status, autonomy, dependence, and risk. The strength of agreement or disagreement would hopefully indicate the respondent's orientation.

This form of the questionnaire was administered to five graduate students and followed by complete discussions of questions and answers. Several important conclusions seemed apparent. (1) Unless only one dimension were tested in each story, the results could be inconclusive; (2) it was extremely difficult to "purify" a story so that it contained only one dimension and still seemed realistic; (3) if several dimensions were tested in each story, they would have to be cross-mixed very carefully in a large number of stories so that single dimensions might be isolated. Since "real-life" situations rarely involve conditions of unidimensional choice, constructing a test of this sort would not reflect realistic occurrences. In a relatively small number of stories containing multidimensional conditions, it would be difficult to speak in terms of single values.

On the basis of all the problems encountered in trying to construct an anecdotal-type questionnaire, it was reluctantly decided to abandon this approach and search for a more manageable testing device.

### The Research Questionnaire

At this point the decision was made to construct a questionnaire consisting of standardized tests in conjunction with personal background questions. One problem with standardized tests is that there may not be one available which will test exactly what the researcher wants to investigate. But standardized tests do offer the advantage of the availability of data on test reliability and validity. Research results on various groups tested may also be available.

After an exhaustive search of tests in The Fifth Mental Measurements Yearbook (1959), Tests in Print (1961), and recent sociological and

psychological journals and abstracts, three tests were selected. These were the Survey of Interpersonal Values, the Dogmatism Scale, and the Authoritarian Personality Scale. Each will be discussed in detail.

Survey of interpersonal values.--The SIV was developed by Leonard V. Gordon. According to Dr. Gordon, an individual may be described in terms of his traits or his values. The former describes his characteristic behavior in a particular situation while the latter describes the individual in terms of his basic motivational patterns. Dr. Gordon said further:

A person's values may determine to a large degree what he does or how well he performs. His immediate decisions and his life goals are influenced, consciously or unconsciously by his value systems. His personal satisfaction is dependent to a large extent upon the degree to which his value systems can find expression in everyday life. The presence of strong, incompatible values within the individual, or conflict between his values and those of others, may affect his efficiency and personal adjustment.<sup>4</sup>

The SIV attempted to determine what is most important to the individual. If it is known what a person considers to be important, the argument runs, it is known what the individual values or what his values are. The SIV, using the forced-choice method, consisted of thirty sets of statements. Each set contained three statements. The respondent was asked to look at each triad and choose the one statement which represented what is most important to him and the one statement which represented what is least important. The three statements within each triad represented three different value dimensions. Gordon pointed out that within each set, each statement had been equated as far as possible for social

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<sup>4</sup>Leonard V. Gordon, Manual for Survey of Interpersonal Values (Chicago: Science Research Associates, Inc., 1960), p. 3.

desirability so that the likelihood of a response to the favorableness of the statement, rather than to its degree of importance, was reduced.<sup>5</sup>

There were six values measured by the SIV: support, conformity, recognition, independence, benevolence, and leadership. The scales were defined in terms of what high scoring individuals value:

Support: Being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration.

Conformity: Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist.

Recognition: Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition.

Independence: Having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way.

Benevolence: Doing things for other people, sharing with others, helping the unfortunate, being generous.

Leadership: Being in charge of other people, having authority over others, being in a position of leadership and power.<sup>6</sup>

Scoring the test was relatively easy. A scoring stencil automatically weighted the answers so that in each triad the statement marked "most important" received a weight of 2, the unmarked statement received a weight of 1, and the "least important" statement, a weight of 0.

The SIV was developed after an extensive review of the values literature. The author hypothesized ten interpersonal value factors and developed over two-hundred items to test these factors. The results of the test group were factor analyzed by the Wherry-Gaylord iterative method.<sup>7</sup>

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<sup>5</sup>Ibid.    <sup>6</sup>Ibid., p. 3.

<sup>7</sup>Gordon refers the reader to Robert J. Wherry and Richard H. Gaylord, "The Concept of Test and Item Reliability in Relation to Factor Pattern," Psychometrika, Vol. 8, December 1943, pp. 247-264.

Triads were assembled to represent different factors of relatively equal social desirability. The triads were reorganized during the several revisions of the scale and only those with the greatest discriminating power were retained. The number of factors was reduced from the original ten factors to the six presently used.<sup>8</sup>

The reliability of the SIV scales and the intercorrelations among the scales are discussed below:

Test-retest reliability coefficients for the SIV scales were determined from scores obtained by administering the SIV twice to a group of 79 college students, with a ten-day interval between administrations. Reliabilities were also estimated by the Kuder-Richardson formula (Case III) on data based on a sample of 186 college students. This formula tends to yield underestimates of reliabilities obtained by other methods. The two sets of reliabilities are presented [below]. These reliabilities are sufficiently high to permit interpretation of SIV scores for individual use.

Reliabilities of Scales of the SIV

	S	C	R	I	B	L
Test-Retest	.83	.86	.78	.89	.83	.88
Kuder-Richardson	.76	.82	.71	.86	.86	.83
No. of Items	15	15	13	16	15	16
Range	30	30	26	32	30	32

.....

Intercorrelations among the scales, based on a sample of 275 college students, are presented [below]. Separate matrices for men and women are not presented since correlations for the two sexes were quite similar.

Intercorrelations Among Scales

	S	C	R	I	B	L
Support		-.09	.40	-.23	-.12	-.52
Conformity			-.38	-.38	.39	-.45
Recognition				-.30	-.37	-.02
Independence					-.44	.06
Benevolence						-.41
Leadership						

<sup>8</sup>Gordon, op. cit., p. 5.

The predominance of negative correlations is due to the interdependence among the scales resulting from the forced-choice format.<sup>9</sup>

In his discussion of validity, Dr. Gordon said:

Insofar as the factors found confirm, to a very large extent, those found in other factor analyses, the SIV scales may be considered to represent reliable, discreet categories and, in this sense, can be said to have factorial validity. This claim is strengthened by the fact that, subsequent to the factor analysis, the scales maintained their internal consistency through repeated item analyses for samples of various composition.<sup>10</sup>

Dr. Gordon mentioned the relationships between the SIV and other measures as a supplementary approach in assessing the validity of his instrument. Scores on the College Qualification Test (providing measures of verbal intelligence and quantitative intelligence) showed generally independent intercorrelations with the SIV scores. Intercorrelations between SIV scales and personality traits measured by the Gordon Personal Inventory and the Gordon Personal Profile showed that values and traits were generally independent of one another. Where significant relationships did occur they were usually those which would logically be expected. The relationships Gordon found between the value scales and behavior patterns (traits) are shown below:<sup>11</sup>

<u>Value</u>	<u>Trait Tendency</u>
Support	Non-reflective, lacking vigor, dependent, unreliable
Conformity	Careful, responsible
Recognition	Anxious, sociable
Independence	Non-sociable
Benevolence	Tolerant and understanding
Leadership	An original thinker, energetic, self-assured, and assertive

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<sup>9</sup>Ibid.

<sup>10</sup>Ibid., p. 6.

<sup>11</sup>Ibid., p. 7.

Correlations between the SIV and the pioneer scale for measuring human values, the Allport-Vernon-Lindzey Study of Values, is presented. The Study of Values has six scales based on a classification of Edmund Spranger. Correlations between the SIV scales and the six scales of the Study of Values based on the scores of eighty-nine college students is reproduced below. (The correlations which are significant at the .01 level are underlined.)<sup>12</sup>

Correlations Between Value Scores  
From the SIV and the "Study of Values"

	S	C	R	I	B	L
Theoretical	-.19	<u>-.36</u>	.08	<u>.36</u>	<u>-.48</u>	<u>.42</u>
Economic	.10	<u>.04</u>	<u>.29</u>	<u>-.18</u>	<u>-.33</u>	<u>.16</u>
Social	.16	.26	<u>-.08</u>	<u>-.31</u>	<u>.59</u>	<u>-.44</u>
Aesthetic	<u>-.04</u>	<u>-.23</u>	<u>-.11</u>	<u>.46</u>	<u>-.09</u>	<u>-.07</u>
Political	<u>-.06</u>	<u>-.14</u>	.17	<u>.01</u>	<u>-.31</u>	<u>.30</u>
Religious	<u>-.01</u>	<u>.37</u>	<u>-.27</u>	<u>-.32</u>	<u>.52</u>	<u>-.24</u>

The above intercorrelations indicate that the Study of Values and the Survey of Interpersonal Values moderately overlap in what they measure. The relationships that are found appear to be quite reasonable. For example, considering the positive relationships, the Theoretical Man, described as empirical, rational, critical and an intellectualist, is high on Independence and Leadership; the Economic Man, the "typical American business man," is high on Recognition; the Social Man, the altruist and philanthropist, is high on Benevolence; the Aesthetic Man, described as an individualist, is high on Independence; the Political Man, the seeker of personal power and influence, is high on Leadership; and the Religious Man is high on Conformity and Benevolence.

Special permission to use the Gordon Survey of Interpersonal Values was granted by Science Research Associates, Inc. of Chicago, Illinois. The Survey of Interpersonal Values appears in the questionnaire as Part 2A under the title "Executive Opinion Inventory."

<sup>12</sup>Ibid., p. 7.

The Dogmatism Scale.--This scale was developed as a part of an investigation by Professor Milton Rokeach into the nature of belief and personality systems. Rokeach was interested in the identification and comparison of high dogmatic (synonymous with "closed"-minded) and low dogmatic ("open"-minded) groups. In The Open and Closed Mind, Rokeach described the starting point of his research:

Long before we were able to define the phenomenon of ideological dogmatism explicitly, it seemed clear that it referred to a number of things: a closed way of thinking which could be associated with any ideology regardless of content, an authoritarian outlook on life, an intolerance toward those with opposing beliefs, and a sufferance of those with similar beliefs. To say that a person is dogmatic or that his belief system is closed is to say something about the way he believes and the way he thinks--not only about single issues but also about networks of issues. The closed mind, even though most people cannot define it precisely, can be observed in the "practical" world of political and religious beliefs, and in the more academic world of scientific, philosophic and humanistic thought. In both of these worlds there is conflict among men about who is right and who is wrong, who is rational and who is rationalizing, and conflict over whose convictions are dogmatic and whose intellectual. In both sets of worlds ideas--and the people and authority figures responsible for them--are accepted and rejected.<sup>13</sup>

In investigating belief systems, Rokeach cautioned that a label of openness or closedness should not be applied to the content of a belief or system of beliefs but rather to the structure of the belief system. As Rokeach put it, "It is not so much what you believe that counts, but how you believe."<sup>14</sup>

According to Rokeach, there are three types of acceptances and rejections: the acceptance and rejection of ideas, of people, and of

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<sup>13</sup>Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960), pp. 4-5.

<sup>14</sup>Ibid., p. 6.



authority. He suggested that these may be merely different facets of the same phenomenon. Knowing something of one of these areas may suggest how an individual will relate to other areas.

Rokeach felt that the Dogmatism Scale would measure general authoritarianism along with its primary aim:

The primary purpose of this scale is to measure individual differences in openness and closedness of belief systems. Because of the way we have defined open and closed . . . the scale should also serve to measure general authoritarianism and general intolerance.<sup>15</sup>

Rokeach argued that other scales designed to test authoritarianism really measure a specific type of authoritarianism instead of general authoritarianism. For instance, the F Scale (discussed later) was originally designed to measure prejudice without the mention of specific minority groups and personality characteristics that might tend toward a fascistic outlook. Rokeach explained that the F Scale also, unfortunately, became known as the "authoritarian personality scale." But, he argued, it is hard to justify the application of a measuring instrument to the area of general authoritarianism when it was developed to focus on fascistic authoritarianism.

The questions included in the Dogmatism Scale were developed to correspond to three perceived dimensions of a belief-disbelief system: a belief-disbelief dimension, a central-peripheral dimension, and a time-perspective dimension.

The belief-disbelief dimension can be discussed in terms of isolation and differentiation.

Isolation refers to the degree of segregation or lack of intercommunication between neighboring regions or sub-

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<sup>15</sup>Ibid., pp. 71-72

regions. It is assumed that the more closed the system the greater the isolation between and within the belief and the disbelief systems.<sup>16</sup>

Items which reflect various aspects of isolation are accentuation of differences between belief and disbelief systems, the perception of irrelevance, and the coexistence of contradictions within the belief system. Items reflecting differentiation include the relative amount of knowledge possessed and the perception of similarity between adjacent disbelief subsystems.

The central-peripheral dimension consists of three layers: the central region, the intermediate region, and the peripheral region.

The central region is composed of a constellation of "pre-ideological" primitive beliefs, for the most part un verbalized, that historically are prior to the rest of the beliefs in the system. These primitive beliefs are concerned with whether the world we live in is friendly or hostile, what the future has in store for us, the adequacy of the self, and what must be done to alleviate feelings of inadequacy. It is assumed that the more closed the system, the more will the content of such beliefs be to the effect that we live alone, isolated and helpless in a friendless world; that we live in a world wherein the future is uncertain; that the self is fundamentally unworthy and inadequate to cope alone with this friendless world; and that the way to overcome such feelings is by a self-aggrandizing and self-righteous identification with a cause, a concern with power and status, and by a compulsive self-proselytization about the justness of such a cause.

. . . . .  
In the intermediate region we have represented beliefs about the nature of positive and negative authority, ranging from rational at one extreme to arbitrary at the other, and beliefs, about people, having to do with the extent to which people are accepted or rejected according to the positive and negative authorities they line up with. The more closed the belief-disbelief system, the more will people be accepted and rejected because they agree or disagree with one's belief-disbelief system.

. . . . .  
The more closed the system, the more will a change in a particular peripheral belief be determined by a prior change in

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<sup>16</sup>Ibid., p. 73.

the intermediate (authority) region. Further, the primitive and intermediate regions are assumed to control not only what will be represented in the peripheral region but also what will not be represented, that is, narrowed out.<sup>17</sup>

The time-perspective dimension reflects the individual's relationship with the past, the present, and the future. Rokeach hypothesized that the more closed the belief-disbelief system, the greater its organization's orientation to the past or future and the more will the present be rejected as being of importance.

The Dogmatism Scale went through a number of revisions to improve reliability. The final form, Form E, had a total of forty items. It was tested on nine different groups representing almost five-hundred individual subjects. The reliabilities ranged from .68 to .93. The author concluded:

These reliabilities are considered to be quite satisfactory, especially when we remember that the Dogmatism Scale contains quite a strange collection of items that cover a lot of territory and appear on the surface to be unrelated to each other. The fact that subjects agree or disagree with these items in a consistent manner is borne out by item analysis. These analyses compare subjects scoring in the upper and lower quarters of the frequency distribution (which is leptokurtic) on each of the items. They typically show that high and low dogmatic subjects differ consistently and in a statistically significant manner on the great majority of items.<sup>18</sup>

To test the validity of the Dogmatism Scale, it was administered to people known to be open or closed in their belief systems. This is the "Method of Known Groups." In Study I, a number of college professors selected graduate students who they felt to be high dogmatic or low dogmatic; in Study II a number of psychology graduate students selected

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<sup>17</sup>Ibid., pp. 75-78.

<sup>18</sup>Ibid., p. 90.

friends and acquaintances who exhibited qualities of high dogmatism and low dogmatism. Each person was given a battery of tests including the California F Scale and the Dogmatism Scale. Study I showed no significant difference between the high dogmatic and low dogmatic groups. Study II, however, showed a sharp difference in scores on the Dogmatism Scale between the two groups (less than one chance in one hundred that the same results could have been obtained by chance). In the second study there was also a very significant difference of scores on the F Scale ( $p < .01$ ). The high dogmatic group scored high on the F Scale and vice versa.

To explain the lack of differentiation between the two groups in Study I, Rokeach suggested that either the professors were poor judges, or more plausibly, that the professors only saw one side of the students' behavior.<sup>19</sup> As to the conclusions, "all we can say . . . is that we have demonstrated thus far that our scales perform essentially the same diagnostic function as performed by the comparable Berkeley scales."<sup>20</sup> At this point, there was no evidence that the Dogmatism Scale tested general authoritarianism.

In order to prove his contention of the difference between general and specific authoritarianism, Rokeach administered a battery of tests to seven groups containing over one-thousand persons. His results showed that authoritarian left-of-center groups (e.g., Communists, and religious non-believers) and authoritarian right-of-center groups (e.g., Catholics) all score relatively high on the Dogmatism Scale. But only

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<sup>19</sup>Ibid., pp. 106-107.

<sup>20</sup>Ibid., p. 107.

those authoritarian groups to the right of center score high on the California F Scale. These results, Rokeach felt, supported his theoretical expectations about the general nature of the Dogmatism Scale.

The instructions used with the Dogmatism Scale were identical to those used with the F Scale.

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others.<sup>21</sup>

The suggested choices after each statement and their weightings were rather cumbersome: I agree very much (+3); I agree on the whole (+2); I agree a little (+1); I disagree a little (-1); I disagree on the whole (-2); I disagree very much (-3). This scheme was changed to conform with the method used in the modified authoritarian personality scale described in the next section. Respondents were asked to indicate the extent of their agreement or disagreement to the items according to a five-point scale.

SA - strongly agree (5)  
 A - agree (4)  
 M - mixed emotions (neither agree nor disagree) (3)  
 D - disagree (2)  
 SD - strongly disagree (1)

The original scheme had two advantages over the revised form--it provided finer gradations of agreement and disagreement and it forced the respondent to express some level of agreement or disagreement. But the revised form was easier to read and understand.

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<sup>21</sup>Ibid., p. 72.

Rokeach, in giving permission to the author to use the Dogmatism Scale, suggested mixing up the item order. A random number table was used to arrive at the order of the questions. The Dogmatism Scale appears as the first forty items in Part 2B of the questionnaire.

The Authoritarian Personality Scale.--This test was originally devised by a team of behavioral scientists at the University of California and has been variously referred to as the "measurement of antidemocratic trends," the "fascism scale" (F scale) or the "California F scale." Their major purpose was the identification and understanding of the authoritarian type of man.

The central theme of the work is a relatively new concept--the rise of an "anthropological" species we call the authoritarian type of man. In contrast to the bigot of the older style he seems to combine the idea and skills which are typical of a highly industrialized society with irrational and anti-rational beliefs. He is at the same time enlightened and superstitious, proud to be an individualist and in constant fear of not being like all the others, jealous of his independence and inclined to submit blindly to power and authority.<sup>22</sup>

The F scale was developed after considerable knowledge, data, and experience had been gained from work on the Anti-Semitism (A-S) scale, the Ethnocentrism (E) scale, and the Politico-Economic Conservatism (PEC) scale. Also incorporated were interview data and results from Thematic Aperception Tests. These sources suggested that underlying many of the responses was a "particularly strong and rigid adherence to conventional values, . . . a general disposition to glorify, to be subservient to and remain uncritical toward authoritative figures of the ingroup and to take an attitude of punishing outgroup figures in the name of some moral authority."<sup>23</sup>

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<sup>22</sup>T. W. Adorno, et al., The Authoritarian Personality (New York: Harper & Row, 1950), p. ix.

<sup>23</sup>Ibid., pp. 227-228.

A number of variables were developed and incorporated into the F scale. These variables and their definitions are:

1. Conventionalism. Rigid adherence to conventional middle-class values.
2. Authoritarian submission. Submissive, uncritical attitude toward idealized moral authorities of the ingroup.
3. Authoritarian aggression. Tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional values.
4. Anti-intraception. Opposition to the subjective, the imaginative, the tenderminded.
5. Superstition and stereotypy. The belief in mystical determinants of the individual's fate, the disposition to think in rigid categories.
6. Power and "toughness." Preoccupation with the dominance-submission, strong-weak, leader-follower dimension; identification with power figures; overemphasis upon the conventionalized attributes of the ego; exaggerated assertion of strength and toughness.
7. Destructiveness and cynicism. Generalized hostility, vilification of the human.
8. Projectivity. The disposition to believe that wild and dangerous things go on in the world; the projection outwards of unconscious emotional impulses.
9. Sex. Exaggerated concerns with sexual "goings-on."<sup>24</sup>

This test was administered to several groups. On the basis of means, standard deviations, discriminatory powers, and correlations with the A-S and E scales, the items were revised. The same procedure was followed on the revised set of items. The third form of the scale, which consisted of thirty items, was given to fourteen groups (total  $N = 1518$ ) and the results showed an average reliability coefficient of .90 and a range of .81 to .97.<sup>25</sup>

A reliability of .90 may be interpreted to mean that the scale can place individuals along a dimension--in this case a broad and complex dimension--with a small margin of error. In other words, the score attained by an individual can be relied upon in the sense that chance errors of measurement have been minimized, so that in a

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<sup>24</sup>Ibid., p. 228

<sup>25</sup>Ibid., p. 257.

repetition of the scale, at a time when political-socio-economic conditions were generally the same as before, his new score would either be the same as his first or fall within narrow limits above or below it. The degree of reliability attained here is within the range which characterizes acceptable intelligence tests.<sup>26</sup>

Professor Ned A. Rosen has used a modified form of the F scale in a study of the effects of behavioral field research on the work performance of factory employees.<sup>27</sup> He selected fifteen items of the original thirty-item scale that showed the most discriminatory power. He then dropped two of the items which dealt with homosexuality and sex crimes because of a recent incident in one of the plants studied. This left a thirteen-item scale. Professor Rosen believed that the loss in reliability of the instrument caused by shortening the number of items should be overcome by using items with the most discriminatory power. The results of the Rosen study showed that the modified F scale significantly discriminated between the groups tested as hypothesized. We have used this modified thirteen-item scale as a part of our questionnaire.

Since the Authoritarianism and Dogmatism Scales both use the same instructions, format, and scoring, the two scales appear as a single set of questions. The modified authoritarianism scale is positioned as the last thirteen items in Part 2B of the questionnaire.

Personal background information.--Data concerning the personal backgrounds of respondents allows us to classify the respondents and to link our results with earlier studies.

<sup>26</sup>Ibid., pp. 258-259.

<sup>27</sup>Ned A. Rosen and Stephen M. Sales, "Behavior in a Non-Experiment: The Effects of Behavioral Field Research on the Work Performance of Factory Employees," Journal of Applied Psychology, in press.



The questions relating to personal backgrounds were divided into two sections. The first part deals with more factual data while the second part delves more into the respondent's attitudes toward childhood, upbringing, education, and work. Wherever possible, questions and choices were phrased so that the results could be compared to several of the preceding studies on business hierarchs and entrepreneurs.

Questions on personal background were included at every phase of the development and pre-testing of the various questionnaire forms. These questions were revised and reworded many times. Some of the questions in the attitude section were experimental. On the basis of the small test samples, little could be determined of their discriminatory power. A total of thirty-four questions appeared in Part 1 of the questionnaire and these will be mentioned in the order in which they appeared.

Items 1, 2, and 3 asked for the sex, age, and marital status of the respondents, respectively. Item 4 asked whether the respondent, the respondent's wife, father, and mother were born in the United States. Information about the respondent's place of birth or the place where most of his childhood was spent were sought in items 5 through 8. The first two questions attempted to ascertain the extent to which the respondents were "home-grown." Item 7 asked whether the respondent spent most of his childhood in the place of birth. The approximate population of the place where most of the respondent's childhood was spent was asked in item 8.

Items 9 and 10 referred to present income. Item 9 asked for yearly income from present employment and item 10 asked whether there was any outside income and, if so, the percent of total income. Items 11 and 12 were concerned with education. The former asked for the highest level attained by the respondent, his father, and his mother. The latter asked

for information on college including the institutions attended, major subjects, number of years attended, degrees, and year received. Item 13 asked whether the respondent had been in the armed services. If so, further questions sought branch of the service, rank on entering, rank at discharge, year of discharge, and number of years in the service.

In item 14 the respondent was asked, "How many business firms have you been employed in during your business career, including your present firm?" Item 15 sought information on the present job as well as the three previous ones. Included were questions on dates employed, location of firm, number of employees, job title or description of work, and reasons for leaving. Father's principal occupation was questioned in item 16.

Items 17 and 18 were concerned with business ownership. The former asked, "Have you ever owned your own business?" If so, further questions were asked on the number of businesses owned and whether there were any partners in any of these businesses. The latter item asked, "Do you now own your own business?" If so, additional questions were asked concerning the number of years in existence, the kind of business, the presence of partners, how the respondent became a business owner, gross sales per year, whether the business was incorporated, and whether more than one business was currently owned.

The second section of the personal background questions dealing more with attitudes and feelings, began with item 19. This item sought the number of children in the family of orientation. The remainder of the items, with two exceptions to be noted, offered the respondent anywhere from three to six alternative answers. Item 20 asked for the respondent's age placement among his siblings. Item 21 asked about the

relative financial condition of his family of orientation. Item 22 inquired about the neighborhood his family lived in. Items 23 and 24 sought information on who raised the respondent. An evaluation of whether the childhood days were happy or not and the type of freedom allowed in childhood were asked in items 25 and 26.

Item 27 listed six benefits which could be received from formal education and asked the respondents to rank these items from most important to least important. Item 28 explored the feelings toward formal education as a preparation for adult life. Item 29 inquired about the feelings toward teachers and item 30 asked about the occurrence of conflict between the respondents and their teachers. In item 31 the respondents were asked where they felt they had gained the most knowledge.

The last three items pertained to work. Item 32 asked for an evaluation of the tiring effect of the respondent's work. Item 33 questioned the degree of pressure under which the respondent worked best and item 34 asked the respondent to rank six features of a job.

#### Pre-testing the Questionnaire

Once the component parts had been assembled, the questionnaire was duplicated and a pre-test sample was developed. An industrial sample of ten persons was chosen with the assistance of the executive director of the Ithaca Chamber of Commerce. Five graduate students also took part in the pre-test.

Each person was approached with a brief explanation of the study's content and asked to fill out the questionnaire. The sample members were requested to record any ambiguities in the questions, the amount of

time it took to fill out the questionnaire, and their general reactions to the questionnaire.

Within several days, the completed questionnaires were picked up and the respondents were interviewed. The amount of time taken to complete the questionnaire ranged from twenty minutes to slightly over an hour. The graduate students were all at the low end of the time range. Two reasons probably accounted for this: first, graduate students can be presumed to be more used to filling out questionnaires or taking "tests"; second, the typical graduate student has little, if any, work history which meant some time savings. The mean time for the ten industrialists to complete the questionnaire was about fifty minutes.

Reactions to the Survey of Interpersonal Values, Dogmatism Scale, and Authoritarian Personality Scale (none of which were identified by name), were mixed. Several respondents noted difficulty in choosing "least" and "most important" items on the triad possibilities. This part of the questionnaire was cited as being the most frustrating by several respondents. Several commented on the wording of some of the items in the combined Dogmatism and Authoritarian Personality Scales. These, of course, could not be altered without losing the advantages of having standardized tests.

The personal background questions, however, could be altered. On the basis of comments received from the respondents, some corrections, additions, and deletions were made.

The entire questionnaire was carefully examined to see if it were possible to shorten the time necessary for completion. Each part of the questionnaire, however, was viewed as a potentially important source of

information. Therefore, it was decided to retain the entire questionnaire and hope that the percentage return would be high in spite of the length of the questionnaire. At this point, the questionnaire was ready for distribution.

## CHAPTER III

### THE RESEARCH SAMPLE

#### Selecting and Contacting the Sample

The selection of an appropriate sample was started concurrent with the formulation of the questionnaire. To accomplish the purposes of this research as outlined in Chapter I, two mailing lists had to be developed which would yield: (1) a group of business owners who could then be separated into "true entrepreneurs" and "other owners" and (2) a group of "business hierarchs."

The business owner sample.--The major problem in developing a sample of business owners was the lack of complete lists of industrial firms in a given geographical area. The major constraint in choosing an area for study was that it be reasonably close to Ithaca, New York. The area also had to be large enough to ensure a return of at least two-hundred useable questionnaires.

The federal and state governments publish data on the number of firms or the number of reporting units in a given locality in conjunction with data collected on payrolls, social security, unemployment insurance, capital construction, and others. The publication dates of most of these reports are sporadic. None of these agencies publish names and addresses of individual firms.

There is a directory of industrial firms in New York State which gives firm names and addresses on a county basis. Originally prepared

by the Department of Commerce of the State of New York, the directory gave a reasonably complete listing of firms, but it was published sporadically. The last volume published by the Department of Commerce was issued in 1958. In 1964, a private publisher took over the publication of the directory with plans to issue it yearly. The new publishers have made a major change in the directory's coverage:

We did not attempt, as has been done in the past, to include every industrial firm and service in the State. Our goal was to concentrate our efforts in the one-third that actually account for approximately 96% of the business.<sup>1</sup>

Using this directory as the source for our business owner sample would not have been consistent with our aims to include businessmen owning firms of all sizes.

The lack of useable compendiums on a federal or state level forced investigation at the local level. Considerable time was spent in the cities of Buffalo, Rochester, and Syracuse.

The firm of Dun and Bradstreet was contacted, but one of their local managers said that the company did not divulge the names and addresses of business owners.

The local power and telephone companies were also contacted in the hope that listings of their industrial customers could be obtained. Two problems were encountered. First the operating territories did not necessarily follow county lines. This would make comparisons of any results with published demographic data impossible. Second, the utilities used a "commercial" classification which included more than industrial users. To separate the industrials from the non-industrials would have been a considerable job.

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<sup>1</sup>New York State Industrial Directory, 1964 (New York: Joseph E. Smith, 1964), ii.

The listings of assumed names and incorporations in the county clerk's office was also investigated. To develop an industrial list from this information would have involved poring through this data year by year sorting out the industrials from the non-industrials. For many firms, it is impossible to tell from the data available what kind of business the firm is engaged in. Since termination of business forms are not always filed, some other means would have had to be employed to determine whether the firms listed were still viable.

City directories also presented the problem of sorting out the industrial firms from the non-industrial firms.

Most local chambers of commerce publish directories of the firms in the community engaged in retailing, wholesaling, and manufacturing. The large city chambers tend to be most interested in the larger firms which represent the economic power in the community. Few large city chambers spend their time, energy, and money in locating the smaller firms. With some of the smaller entrepreneurs operating out of basement or back-alley shops which are not properly zoned, with neighbors complaining to local authorities about machine noise or lights, most chambers hesitate to admit that such operations exist let alone list them in their industrial directory. This emphasis on the larger firms to the exclusion of the smaller firms exists in both Buffalo and Syracuse.

The situation is somewhat different in Rochester. There is an attempt, at least, to identify all industrials no matter what the size. This attitude might have developed over the years because of the high percentage of home-owned industry and the evidence of what a small business can develop into--a Kodak, a Bausch and Lomb, a Xerox. These



important economic powers started in the Rochester area. The Rochester Chamber has enlisted the support of their members as well as the local utilities in keeping their listing up to date. Every few years, a formal survey is run and a new directory is published. This interest in keeping abreast of new entries has achieved moderate success.

The latest Industrial Directory of Rochester and Monroe County, New York was published April 1964. The directory lists a total of 925 industrial firms. This figure includes 13 firms which are geographically located outside of Monroe County but listed because they are members of the Rochester Chamber. This leaves 912 Monroe County firms. Is this number of firms reasonably close to the total number of industrial firms in the county?

The publication County Business Patterns is a statistical by-product of employment and payroll information reported by Treasury Form 941 Schedule A (a social security withholding form used by employers). The data is presented in terms of "reporting units" wherein each manufacturing location of a company is counted as a separate reporting unit. The number of reporting units includes all those units which paid wages to at least one employee sometime during the first quarter of the year reported. Looking at the three latest years of publication, there were 955 reporting units in Monroe County in 1959,<sup>2</sup> 907 reporting units in 1962,<sup>3</sup> and 919 reporting units in 1964.<sup>4</sup> In comparing these numbers to

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<sup>2</sup>U.S. Bureau of the Census and U.S. Bureau of Old-Age and Survivors Insurance, County Business Patterns, First Quarter 1959, Part 3A, p. 133.

<sup>3</sup>U.S. Bureau of the Census, County Business Patterns, First Quarter, 1962, Part 3A, p. 157.

<sup>4</sup>U.S. Bureau of the Census, County Business Patterns, 1964: New York CBP-64-34, p. 73.

the Rochester Chamber of Commerce listings, two points must be noted. First, if a firm has several plants, it will be counted several times by CBP and only once by the Chamber. The number of multiplant operations is not known, but assumed to be relatively small. Second, the CBP includes only those firms which had one or more persons on the payroll during the first quarter of the reporting year. It is not known how many one-man operations there may be, nor is it known how many would have been identified by the Chamber. Assuming that both effects are relatively small and also realizing that they operate in opposite directions, we can say that the Chamber listing reflects a reasonably complete picture of industrial operations in Monroe County for a given point in time.

A typical listing in the Chamber's directory includes the firm name, address, approximate size, name and title of principal officer or officers, brief descriptions of products, and the Standard Industrial Classification. The officers of the Rochester Chamber of Commerce offered much assistance in deleting those firms not in Monroe County, the firms that were subsidiaries of national firms (81), and the large corporations which had no known tie with the original entrepreneur.

In cases where two or more partners were listed as owning an enterprise, all partners were included in the mailing. There were also several cases where an individual was listed as owner, partner, or principal officer of more than one firm. Where this occurred, the questionnaire was sent to the larger or largest of the firms. Following these procedures, a mailing list of 780 individuals was developed.

The business hierarch sample.--With the business owner sample coming from Rochester and Monroe County, it was desirable to have the

business hierarch sample from the same area. The original intent was to contact one of the larger companies and persuade them to contribute a list of 200-300 executive names primarily from the lower-to-middle management range. Lengthy discussions were held with two of the larger Rochester corporations. They seemed very interested in the study, judging from the amount of time they devoted to discussing the project, but both decided against any involvement. Their major concern was in preserving whatever level of tranquility happened to exist. They even feared rocking the boat with their own research studies.

The remaining larger firms in Rochester are not home-owned which would have invited lengthy correspondence with home offices. Another trip to the Rochester Chamber of Commerce resulted in the suggestion of using the mailing list of a professional organization. Their first suggestion was the Rochester Engineering Society, Inc.

The executive director of the society was pleased to have his organization used for this research and gave his permission to use the name of the organization in the cover letter for the questionnaire. He supplied a membership list dated July 1964 and recommended the deletion of the names of some recent retirees. Also removed were university professors and those members living outside Monroe County. The resulting list contained 179 names. According to the executive director, the members were of all ages, represented a good cross-section of Rochester industry, and many had achieved managerial positions at various levels.

Questionnaire mailing and follow-up.--The 959 questionnaires were mailed out in six batches during March and April 1965. Each questionnaire was accompanied by a personally addressed two-page cover letter and a postage-free return envelope. The cover letter was sent over

the signature of Professor David G. Moore, Dean of the New York State School of Industrial and Labor Relations at Cornell University. The cover letter for the business owner sample mentioned the cooperation of the Rochester Chamber of Commerce, while the cover letter for the business hierarch sample mentioned the cooperation of the Rochester Engineering Society. (A sample cover letter appears in the Appendix.)

The bottom of the last page of the questionnaire mailed to each person in the business owner sample had a handwritten code number below this printed paragraph:

The following code will enable us to tell the size of your firms. This is necessary in order to ensure that the proportion of firms in each size category approximates the actual distribution in the County. This information will also be used in conjunction with the present size of your firm to determine growth rates in the time period since the Industrial Directory was published. No attempt will be made to match individual responses with specific companies. Anonymity is guaranteed. However, if you are at all concerned about anonymity and the confidential nature of the questionnaire, just tear off the code number. But be sure to return the questionnaire.

The code was used to identify respondents for easier follow-up of the business owners. No follow-up was planned for the business hierarch sample and therefore there was no explanation or code number.

The first follow-up of business owners occurred about a month after the questionnaires were mailed out. Each non-respondent in the sample was contacted by telephone. An attempt was made to talk directly to each person on the list. Direct contact was made with about 75 percent of those called. For the remainder, a message was left with the individual's secretary or assistant.

A small number of the questionnaires had come back because of no forwarding address, addressee deceased, or addressee no longer associated

with the firm. The telephone follow-up revealed that a large number of firms on the Chamber listing were no longer listed in the latest telephone directory. A spot check indicated that these firms had been listed in previous directories. As a result of the phone calls, other persons on the business owner mailing list were found to have retired, died, or sold the business. From all of these causes, the total number of potential respondents was reduced from 780 to 635 persons. This seems to show that although the total number of firms at several points in time tend to indicate stability, there are a considerable number of persons and firms continuously entering and leaving the industrial scene.

As a second follow-up, a reminder letter was mailed out in two groups, in May and July. A sample of this letter appears in the Appendix. It is estimated that the follow-up phone calls and letters increased the percentage returns from 5 to 10 percent.

Sample returns.--Of the 780 questionnaires mailed out in the business owner sample, 209 useable questionnaires were received. This represents a return of 27 percent. If the percentage returned is based on the potential number of respondents (corrected for those retired, deceased, or no longer in business), the figure becomes 33 percent.

Of the 179 questionnaires mailed out in the business hierarch sample, 94 useable returns were received. This represents a return of 53 percent.

There is a considerable disparity between the returns for the two groups. Talking with many of the business owners during the follow-up phase revealed that one of the most pressing problems faced by the businessman and particularly the small businessman, was the lack of time. They complained of the long hours they must work and the lack of good

help. They also complained about the many forms they had to fill out and the records they had to keep. In larger firms, the owner could delegate such paperwork but in the smaller firms, the owner had to do everything himself. Some refused to complete the questionnaire unless forced to by government requirement. Others refused to participate because the results would produce no immediate benefit to them personally.

The engineering group was expected to be more likely to have an academic interest in the study and to take the time to respond. The majority of persons in this group were college graduates and would, therefore, tend to have an understanding of social research.

In summary, the returns were probably proportional to the interest and time of the individuals involved.

#### An Initial Look at the Respondents

Although the two mailing lists provided a rough division into business owners and business hierarchs, a certain amount of crossing of lines was expected. Some of the engineering group might own their own businesses and some of the persons on the Chamber of Commerce list might be hired managers with no proprietary interests. To correct for these aberrations, the question was asked, "Do you now own your own business?" A total of 110 answered "no." This was the business hierarch group. Included were 83 respondents from the Rochester Engineering Society (11 listed themselves as owning their own business) and 27 respondents from the Rochester Chamber of Commerce list. The remaining 193 respondents, who answered "yes" to the ownership question comprised the business owner group.

As discussed in Chapter I, the business owner sample would be separated into two groups reflecting: (1) the true entrepreneurs who created a new business where none previously existed, and (2) the other owners who became the owners of previously existing businesses. The origins of these firms are shown in Table 3.1.

Table 3.1.--The origin of true entrepreneurs and other owners

Origin	True Entrepreneurs	Other Owners
Started the business from "scratch"	58.5%	- %
Inherited or purchased from a relative	-	22.8
Purchased from a non-relative	-	18.7
Total	58.5%	41.5%
Number of Cases	113	80

The distinction between these two categories could have become somewhat clouded. Some of the respondents own more than one business. In such a case, the questionnaire was sent to the larger or largest known firm. Presumably the respondent would be answering the questionnaire with reference to that firm. There was no assurance, however, that if a man owned more than one firm that both or all came into existence in the same manner. Twenty-five to 30 percent of the business owner respondents reported owning more than one firm. This would represent the maximum possible error in classification. The error is probably far less.

Sex and age.--Although there were a few females on both mailing lists, all 303 respondents were male.

The average ages for the three groups in this study as reported at the time of the study were:

True entrepreneurs	(105 reporting)	52 years
Other owners	( 75 reporting)	51 years
Business hierarchs	(100 reporting)	50 years

These figures show no significant differences<sup>5</sup> among the average ages of the three groups. The average ages compare very favorably with the Collins and Moore study<sup>6</sup> as well as the Warner and Abegglen study,<sup>7</sup> where the averages were 52 and 53 years respectively. In Dr. Thomas R. O'Donovan's study of executives and lower managers the average age was 46.<sup>8</sup>

Table 3.2 compares the age ranges found in the present studies with the ages of the Collins and Moore entrepreneurs. Also shown are the census data for adult males 25 years of age and over in the Rochester Standard Metropolitan Statistical Area (Monroe County).

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<sup>5</sup>The chi square test has been used to measure the significance of the observed data. The null hypothesis states that the same results could have happened by chance. The data is termed "significant" when the null hypothesis is rejected at the .05 level which means that there is only one chance in twenty that the same results could have occurred by chance. The results are "highly significant" when the null hypothesis is rejected at the .01 level (only one chance in one hundred of identical results by chance). The significance of the chi square depends on the number of row and column variables. An entire table is either significant or not significant. The computed chi square values and their significances for all of the tables in this study are presented in the Appendix.

<sup>6</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 232.

<sup>7</sup>W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 131.

<sup>8</sup>Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 146.



Table 3.2.--Ages at time of study of true entrepreneurs, other owners, and business hierarchs compared with the Collins and Moore entrepreneurs and the Rochester SMSA adult male population

Age	True Entrepreneurs	Other Owners	Business Hierarchs	Collins & Moore Entrepreneurs <sup>a</sup>	1960 Rochester Adult Males <sup>b</sup>
25-29 years	- %	- %	1.0%	- %	10.4%
30-34 years	3.8	2.7	5.0	1.2	11.6
35-39 years	8.6	9.5	7.0	7.3	12.4
40-44 years	12.4	12.2	21.0	12.2	12.0
45-49 years	23.8	18.9	12.0	22.0	11.0
50-54 years	10.5	25.7	22.0	29.3	9.6
55-59 years	12.4	16.2	10.0	14.6	8.6
60-64 years	14.3	8.1	17.0	4.9	7.6
65-69 years	7.6	4.0	4.0	6.1	6.5
70 years and older	6.6	2.7	1.0	2.4	10.3

Total

100.0%

100.0%

100.0%

100.0%

100.0%

Number of Cases

105

75

100

82

<sup>a</sup>From Table 2 in Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 233.

<sup>b</sup>Computed from data appearing in U.S. Bureau of the Census, U.S. Census of Population: 1960, I, Part 34, p. 63.

The mode for the true entrepreneurs seemed to be 45-49 years of age while the mode for the other owners was 50-54. The business hierarchs appeared to be bimodal at 40-44 and 50-54 years of age. The differences among the three groups were not statistically significant.

There appears to be two or three times as many true entrepreneurs 65 or older than other owners and business hierarchs. In the case of the business hierarchs, compulsory or early retirements would explain the difference. The difference between the entrepreneurs and other owners is not as evident. Perhaps it reflects the entrepreneur's greater identification with the firm and his unwillingness to step out of the business picture.

The age distribution of the Collins and Moore entrepreneurs is similar to the distribution of the entrepreneurs and owners. The census data reflect the age distribution of the entire community with no regard for occupations. The respondents appear to be more heavily representative of the middle age groups.

Marital status.--The large majority of the respondents reported being married. The married respondents were asked to indicate whether they had any children. Table 3.3 shows the marital status of the respondents with comparable data for adult males in the Rochester SMSA.

The true entrepreneurs tended to have more childless marriages than the other owners and the business hierarchs, but the data were not statistically significant. The census data include all males fourteen years of age and over which explains the high incidence of single persons.

Income.--Respondents were asked to indicate their income from present employment in a multiple-choice-type question. The ranges were

Table 3.3.--Marital status of true entrepreneurs, other owners, and business hierarchs compared with the Rochester SMSA adult male population

Marital Status	True Entrepreneurs	Other Owners	Business Hierarchs	1960 Rochester Adult Males*
Single	1.7%	- %	0.9%	23.6%
Married no children	12.4	6.3	4.6	} 67.9
Married with children	84.1	91.2	90.9	
Widowed, separated, or divorced	1.8	2.5	3.6	8.5
Total	100.0%	100.0%	100.0%	100.0%
Number of Cases	113	80	110	

\*Computed from data appearing in U.S. Bureau of the Census, U.S. Census of Population: 1960, I, Part 34, p. 482.

chosen so that a check could be made with comparable census data. The figures are given in Table 3.4

None of the business hierarch respondents reported an income below \$7,000 from present employment. Over 9 percent of the true entrepreneurs and 4 percent of the other owners had incomes below \$7,000. Sixty percent of the business hierarchs earned \$10,000 to \$20,000 per year compared with 44 percent of the true entrepreneurs and 36 percent of the other owners. The other owners seemed to have a greater frequency of respondents in the \$20,000 to \$25,000 income range but in the \$25,000 and over categories, the three groups were very similar. These income differences among the three groups were significant at the .05 level.

When these results are compared with the census data for the Rochester SMSA, it is evident that our respondents have incomes considerably higher than the community as a whole.

Table 3.4.--Income of true entrepreneurs, other owners, and business hierarchs compared with the Rochester SMSA adult male population

Income	True Entre- preneurs	Other Owners	Business Hierarchs	1960 Rochester Adult Males*
Less than \$5,000	3.7%	- %	- %	53.0%
\$ 5,000- 5,999	2.7	1.3	-	14.4
\$ 6,000- 6,999	2.7	2.6	-	9.8
\$ 7,000- 9,999	4.6	11.5	2.8	12.7
\$10,000-14,999	24.8	19.2	37.0	} 10.1
\$15,000-19,999	19.3	16.7	23.2	
\$20,000-24,999	10.1	19.2	8.3	
\$25,000-49,999	22.9	20.5	22.2	
\$50,000 and over	9.2	9.0	6.4	
Total	100.0%	100.0%	100.0%	100.0%
Number of Cases	109	78	108	

\*Computed from data appearing in U.S. Bureau of the Census, U.S. Census of Population: 1960, I, Part 34, p. 299.

In summary, the true entrepreneurs were spread out more than the other two groups among the lower- and middle-income categories. The business hierarchs had no respondents in the low-income categories while the other owners had a frequency spread in between the other two groups. At the high-income end, the three groups had about the same frequencies.

Job title.--A person's job title may be indicative of his role and duties in the organization. In this age of job sophistication, however, job titles have kept pace. Each company seems to have its own idiosyncracies concerning titles. It gets harder and harder to compare titles without knowing the particular companies involved.

For the business owners, there was no problem. About 90 percent of both groups were presidents, owners, or partners. The remainder had

titles of vice-presidents, general managers, sales managers, etc. All, of course, were owners or part owners of their businesses.

The comparison of job titles for the business hierarchs was more difficult. Almost 20 percent of the business hierarchs were presidents or chairmen of the board of their corporations. Another 15 percent were functional vice-presidents or their equivalents. Once this level is passed, there appeared to be a different job title for almost every respondent. For example, there was an assistant director of engineering, a director of machine manufacturing operations, a technical engineer, a development engineer, an assistant department manager, a property records engineer, a chief engineer, several assistant superintendents for various things, a supervisor of process and equipment development, a section head mechanical consultant, a liaison engineer. The list went on and on. Obviously, these titles defied categorization and comparison. The business hierarch group, however, seemed to run the gamut of management levels.

Summary.--After this initial look at the three groups, it can be seen that they were generally similar in the areas of sex, age, and marital status. None of these factors seemed to significantly determine a man's vocational choice. The three groups can be more confidently compared on other variables with the knowledge that the composition of the groups with regard to the above factors is homogeneous. There were no significant differences among the income levels of the three groups.

#### A Comparison of the True Entrepreneurs and Other Owners

The remainder of this chapter will be devoted to an analysis of the businesses owned by the two business owner groups. Included will be

the number of businesses owned, the presence of partners, the age of the business, the size of the firm, the legal status of the business, the type of business owned, and the gross sales.

Number of businesses owned.--Respondents were first asked if they had ever owned a business. In addition to the 193 respondents in the business owner groups, nine business hierarchs reported having owned a business at one time. Eight of the hierarchs owned one business each while the other business hierarch had owned two businesses. Forty percent of the true entrepreneurs and 28 percent of the other owners have owned more than one business during their careers. Ten percent of the true entrepreneurs have owned four or more businesses compared with 6 percent of the other owners.

Respondents were also asked how many businesses they owned at the time of the study. The results are shown in Table 3.5. The results were similar. Thirty percent of the true entrepreneurs and 21 percent

Table 3.5.--Number of businesses owned at time of study by true entrepreneurs and other owners

Number	True Entrepreneurs	Other Owners
One business	70.8%	78.8%
Two businesses	17.7	13.7
Three businesses	5.3	5.0
Four or more businesses	6.2	2.5
Total	100.0%	100.0%
Number of Cases	113	80

of the other owners owned more than one business. About one in ten of both groups owned three or more businesses. The differences between the two groups were not statistically significant.

Collins and Moore suggest that entrepreneurs may have a tendency to go in and out of business several times. They describe this activity as one part of "basic dealing," the core course in the "School for Entrepreneurs."

The purpose of the course is to teach the student the basic technique of entrepreneurship: the bringing together of ideas, people, and money in an arrangement profitable to the student. The student taking the course should be expected to undergo and learn from a set of rigorous experiences, which may include the following: (1) being looked upon by friends and relatives as a hopeless big talker who allows his wife and children to go hungry while he is out chasing rainbows, (2) being rejected by reputable sources of financing, and forced to deal with shady individuals and finance houses, (3) being eliminated from the transaction if associates find this profitable and can accomplish it, (4) being aware, after having finished a deal, that instead of coming out of it with a profit one may come out far in the hole and tied for years to an unprofitable line of enterprise, (5) being adept at leaving creditors and other associates holding the bag, while the student slips out of an unprofitable line of enterprise, (6) being accused of double-dealing by associates you have either dealt out or left holding the bag.<sup>9</sup>

The incidence of "basic dealing" cannot be directly investigated from the present data. This type of information might be easier to obtain through field interviewing. Looking at the responses to the questions about the total number of firms owned and the number of firms currently owned, it can be seen that 11 percent of the true entrepreneurs and 7 percent of the other owners that owned one business, have owned two or more businesses during their careers. These might represent a portion of the respondents who have been involved in "basic dealing." Without

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<sup>9</sup>Collins and Moore, op. cit., p. 104.

comparative data, it is not known whether these are high or low percentages.

Presence of partners.--Collins and Moore devoted considerable space to the subject of the entrepreneur and his partner or partners. The partner can be very important to the entrepreneur at the stage in which he is attempting to gather about him all the resources necessary to start the enterprise. The partner may bring to the organization one or more needed resources such as capital, contacts, engineering ability, sales ability, or just plain physical labor.

After the firm has emerged from the stage of having to fight for mere existence ("getting through the knothole" as Collins and Moore describe it), the entrepreneur has the opportunity to purge his organization. Collins and Moore describe three interrelated tasks which must be performed at the organizational level. These involve: (1) reorganizing the business structure to remove elements originally thrown together to get things going or to better meet earlier situations; (2) regaining control of the firm by eliminating situations which had forced compromises and jeopardized the entrepreneur's position; (3) rationalizing the system or disengaging interest in every minute detail of the present and devoting increasing effort to reorganizing the firm and planning for the future.<sup>10</sup> Timing is very crucial.

For most entrepreneurs and for most firms, there seems to be a golden moment at which these problems can be acted on. Action cannot be premature. The entrepreneur must have developed, through his long period of training and experience, the ability to identify these moments and to choose the correct strategy to move decisively.<sup>11</sup>

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<sup>10</sup>Ibid., pp. 190-199.

<sup>11</sup>Ibid., p. 195.



At this point, the entrepreneur, if he is to regain control of his organization, must exhibit his mastery of the transactional model of interpersonal relations. He must cleanse his business of involvement with people and things that may hamper his present control or future plans.

[True entrepreneurs] believe it is morally correct for them to immediately sever a relationship which is no longer profitable, regardless of the economic consequences (debtors who are not paid, stockholders who lost investments, etc.) to other parties in the transaction. They believe, also, that other men will act in terms of the same rationale. The adult and mature entrepreneur is not a "cry baby." He expects to be "welshed out" if it is to the advantage of the other party to do so. It is the entrepreneur's job to see that it is not to the advantage of others to deal him out, and to so arrange things that they cannot deal him out. By the same token, the mature entrepreneur learns how to prevent his colleagues from getting out even when it may be advantageous to them. Such a rational model of behavior is highly acceptable to the entrepreneur, and indeed is the acceptable form of business enterprise in the Western world.<sup>12</sup>

Collins and Moore refer to purging the organization of its human problems as "getting rid of partners."

The questionnaire could not determine the extent of getting rid of partners in the terms described above. More than two thirds of the respondents in both groups reported having had a partner in at least one of their business ventures. (Of the nine business hierarchs who had at one time owned a business, three reported having had a partner.) The incidence of partners in the present business and whether they had been retained or removed at the time of the study can also be discussed. Table 3.6 presents this information.

Almost half of both groups had partners in their present ventures. A slightly higher percentage of the other owners than true

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<sup>12</sup>Ibid., p. 130.

Table 3.6.--Incidence of partners in present businesses of true entrepreneurs and other owners

Partners	True Entrepreneurs	Other Owners
Have partners in present business		
Close relatives	23.9%	28.8%
Not close relatives	24.8	16.2
Do not have partners in present business		
Once had partners	16.8	17.5
Never had partners	34.5	37.5
Total	100.0%	100.0%
Number of Cases	113	80

entrepreneurs reported that their partners were close relatives. Over one third of both groups reported never having had a partner in their present business. The remaining one sixth of both groups had had partners at one time but did not have partners at the time of the study. There was no significant statistical difference between the two groups.

Whether the figure for "getting rid of partners" represents a high or low occurrence is difficult to determine because there are no data with which to compare it. About all that can be said is that there was some incidence of partners being removed. Neither the circumstances nor the reasons for their departure, however, were known.

The age of the business firm.--The businesses owned by the other owners have been in existence longer, on the average, than those owned by the true entrepreneurs. The comparative ages are shown in Table 3.7.

All of the firms owned by true entrepreneurs were less than 50 years old. The firms could not be much older because the founder was

Table 3.7.--Ages of firms owned by true entrepreneurs and other owners

Age of Firm	True Entrepreneurs	Other Owners
Under 10 years in existence	22.1%	5.2%
10-19 years	34.5	11.7
20-29 years	23.1	13.0
30-39 years	9.7	13.0
40-49 years	10.6	20.8
50 years or more in existence	-	36.3
Total	100.0%	100.0%
Number of Cases	113	77

presumably still in charge. The average age of businesses owned by the true entrepreneurs appeared to be between 15 and 20 years old. The average age of firms owned by the other owners was somewhere between 40 and 50 years old. The differences in ages between the two groups were highly significant ( $p < .01$ ). This difference would be expected by definition. The other owners became business owners through inheritance or the purchase of an existing organization. Their firms would, therefore, tend to be older.

Size of firm.--Table 3.8 presents data on the size of firms owned by the respondents. Also included in the table is the percentage size distribution of the Monroe County firms listed by the Rochester Chamber of Commerce.

In both groups, over 55 percent had fewer than 25 employees. The true entrepreneurs seemed to have a greater proportion in the smaller category while the other owners had a greater frequency in the 10 to 24 person range. A higher percentage of the true entrepreneurs than the

**Table 3.8.--Size of firms owned by true entrepreneurs and other owners compared with the Rochester Chamber of Commerce industrial listings**

Size of Firm	True Entrepreneurs	Other Owners	Chamber Directory*
1- 9 persons	36.1%	25.4%	47.5%
10- 24 persons	19.4	31.6	21.6
25- 49 persons	21.3	15.2	9.9
50- 99 persons	12.9	17.7	7.4
100-199 persons	5.6	6.3	5.8
200 or more persons	4.7	3.8	7.8
Total	100.0%	100.0%	100.0%
Number of Cases	108	79	912

\*Computed from data appearing in Rochester Chamber of Commerce, Industrial Directory of Rochester and Monroe County, New York (Rochester, N.Y.: Rochester Chamber of Commerce, 1964).

other owners had firms with 25 to 49 persons while the reverse is true in the 50 to 99 person category. Both showed similar percentages of firms over 100 persons. The differences between the two groups were not statistically significant.

It can be seen that the responses in the smallest-size category were lower than the presumed representation of firms of this size in the community. These small businessmen were the ones who complained most about lack of time. These businesses were too small to afford a division of management and, therefore, the owner was forced to do almost everything himself. The response in the 25 to 100 person firms was considerably higher than their representation in the community.

From these data, it appears that our respondents were not representative in size to the community as a whole. It will be remembered, however, that almost 20 percent of the mailing list developed from the

Rochester Chamber's listings could not be reached because of death, retirement, or business dissolution. The great majority of these firms were listed as employing from 1 to 9 persons. The size of firms was taken from the questionnaire responses. A spot-check revealed that several firms had grown in size since the directory was published. It can be assumed, therefore, that some of the firms listed as having 1 to 9 persons in the directory were tallied as larger in the presentation of the results. In light of both of these effects, it is hard to say anything definite about the representativeness of the size of the respondents' firms in the general community.

Legal status.--Seventy-five percent of the businesses owned by true entrepreneurs and 83 percent of those owned by other owners were incorporated. Of those that were incorporated, more than half report that all of the corporate stock was owned by the respondent or his immediate family.

Type of business.--Table 3.9 compares the Standard Industrial Classification for the respondents with the distribution of SIC's for the Monroe County firms listed by the Rochester Chamber of Commerce.

The data show that the true entrepreneurs and other owners were similar in their distribution of type of firm by Standard Industrial Classification. The data show no statistical significance between the two groups. The respondents appear to reflect a representative cross-section of the community's industrial mix.

Gross sales.--Respondents were asked to indicate their annual gross sales, within six ranges. These ranges and their answers appear in Table 3.10.

**Table 3.9.--Standard Industrial Classifications of firms owned by true entrepreneurs and other owners compared with the Rochester Chamber of Commerce industrial listings**

SIC	True Entre- preneurs	Other Owners	Chamber Directory*
Ordinance and accessories	- %	- %	0.1%
Food and kindred products	9.0	6.4	10.2
Tobacco manufactures	-	-	0.1
Textile mill products	1.8	2.6	0.9
Apparel	0.9	2.6	3.2
Lumber and wood products	1.8	3.8	2.6
Furniture and fixtures	2.7	3.8	2.7
Paper and allied products	2.7	2.6	3.7
Printing and publishing	11.7	14.1	15.1
Chemicals	2.7	5.1	4.4
Petroleum refining	1.8	-	0.9
Rubber and plastics	0.9	1.2	2.0
Leather	-	2.6	1.3
Stone, clay and glass	4.5	5.1	3.6
Primary metals	1.8	2.6	1.8
Fabricated metal products	12.6	15.4	11.9
Machinery, except electrical	25.3	23.1	18.0
Electrical machinery	4.5	1.3	3.8
Transportation equipment	0.9	-	0.9
Professional and scientific instruments	9.0	2.6	6.5
Miscellaneous manufacturing	5.4	5.1	6.3
Total	100.0%	100.0%	100.0%
Number of Cases	108	77	912

The true entrepreneurs reported a slightly higher percentage of gross sales than the other owners in both the \$50,000 to \$100,000 and the \$1 million to \$5 million categories. The other owners seemed to have a greater frequency in the middle-sales ranges. The differences, however, were not statistically significant.

Summary.--In this comparison of the true entrepreneurs and other owners, the two groups were found to be very similar. There were no

Table 3.10.--Annual gross sales of firms owned by true entrepreneurs and other owners

Gross Sales	True Entrepreneurs	Other Owners
Under \$50,000	10.0%	11.4%
\$ 50,000-\$ 99,999	20.9	7.6
\$ 100,000-\$ 249,999	15.5	24.1
\$ 250,000-\$ 499,999	17.3	21.5
\$ 500,000-\$ 999,999	12.7	17.7
\$1,000,000-\$4,999,999	19.1	13.9
\$5,000,000 and over	4.5	3.8
Total	100.0%	100.0%
Number of Cases	110	79

statistically significant differences in the number of businesses owned, the presence of partners, the size of the firms, the legal status of the firms, the type of business owned, or the annual gross sales. The firms owned by other owners were in existence significantly longer than the firms owned by true entrepreneurs. (This result would be expected from the definitions of the two groups.) It can be concluded that the true entrepreneurs and other owners owned similar business operations.

### Chapter Summary

This chapter has described the selection of the two samples and their division into three groups: true entrepreneurs, other owners, and business hierarchs. The sex, age, and marital status of the three groups were investigated and no significant differences were found. A significant difference did exist among the income levels of the three groups. This may be explained partly by the fact that many owners do not take

regular salaries so that their figures could be approximations. In general, it can be concluded that the three groups were similar in basic demographic factors.

The two business owner groups were also investigated and their business operations were compared. The conclusion was that the two groups were similar in these respects.

The major findings of the research will be analyzed in Part II.



## PART II

### THE RESEARCH FINDINGS

## CHAPTER IV

### SOCIAL ORIGINS OF TRUE ENTREPRENEURS, OTHER OWNERS, AND BUSINESS HIERARCHS

"The childhood shows the man, as morning shows the day."

John Milton,  
Paradise Regained

This chapter will deal with several aspects of the origins of business hierarchs and business owners. Among the areas investigated will be nativity, place of birth, father's occupation and education, family of orientation, and impressions and recollections of childhood. Each of these can have a profound effect on the development of the individual and may help to point the way toward an occupational career of self-employment or working for others.

#### Nativity

Table 4.1 shows the percentages of native-born and foreign-born respondents in the three groups.

A higher percentage of the entrepreneurs were foreign-born than business hierarchs or other owners. Using a chi square test, these results were significant at the .05 level, which means that a distribution such as that found in Table 4.1 could arise from chance only once in twenty times.

Table 4.1.--Nativity of true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
U.S.-born	87.6%	96.2%	95.5%
Foreign-born	12.4	3.8	4.5
Total	100.0%	100.0%	100.0%
Number of Cases	113	80	110

Mabel Newcomer found that almost 23 percent of the manufacturing proprietors in her study of Poughkeepsie businessmen had been born outside the United States.<sup>1</sup> The Collins and Moore research showed that 20 percent of the entrepreneurs were foreign-born.<sup>2</sup> Both of these studies were characterized by almost twice the proportion of foreign-born respondents that our entrepreneurs reported. Warner and Abegglen found that 5 percent of their business executives were born outside the United States which agrees favorably with the business hierarch and other owner responses.<sup>3</sup>

The 1960 census data for the Rochester SMSA (Monroe County) shows that 10 percent of the total population of the county had been born

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<sup>1</sup>Mabel Newcomer, "The Little Businessmen: A Study of Business Proprietors in Poughkeepsie, New York," Business History Review, Vol. 35, Winter 1961, p. 514.

<sup>2</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 234.

<sup>3</sup>W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 90.

outside the United States.<sup>4</sup> The business hierarchs and other owners ranked considerably below this figure. The true entrepreneurs had a higher incidence of foreign-born among their numbers than the population of the community. Since close to 60 percent of the other owners became business owners through inheritance or purchase from relatives, one might expect to see a higher percentage of native-born respondents than among the true entrepreneurs. The other owners, in fact, exhibited the highest percentage of native-born respondents.

There is no easy explanation for this disparity in figures for business hierarchs and true entrepreneurs. The fact remains that a higher percentage of foreign-born in the community at large entered self-employment while a considerably lower percentage were successful in existing organizations. Foreigners may face language barriers or educational deficiencies which preclude success working for others. Or they may just prefer self-employment. Newcomer says: "The foreign born have not found the handicaps of language, lack of capital, and relatively slight schooling insuperable barriers to going into business for themselves. On the contrary, they are found among the little businessmen in disproportion to their numbers."<sup>5</sup> She feels that the foreign-born, with their more limited choice of occupations, regard business ownership as one of the more promising ways of getting ahead. Collins and Moore agree by concluding: "Clearly ethnicity is no barrier to entrepreneurship. In fact, if anything it may be a motivational factor."<sup>6</sup>

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<sup>4</sup>U.S..Bureau of the Census, United States Census of Population: 1960, I, Part 34, p. 199.

<sup>5</sup>Newcomer, op. cit., p. 482.

<sup>6</sup>Collins and Moore, op. cit., p. 233.

Data are also available on the number of U.S.-born respondents whose fathers were foreign-born. Twenty-seven percent of both the true entrepreneurs and other owners reported that their fathers were born outside the United States. This compares with 22 percent for the business hierarchs. Collins and Moore report that 35 percent of their U.S.-born respondents had foreign-born fathers.<sup>7</sup> (This must be qualified by the fact that this percentage is based on only 40 of their total sample of 150 individuals.) Warner and Abegglen found that almost 20 percent of their U.S.-born sample had foreign-born fathers.<sup>8</sup> The results of the present study seem to agree more closely with the business leader sample of Warner and Abegglen than with the entrepreneurial sample of Collins and Moore. Table 4.2 summarizes the data on foreign-born respondents and their foreign-born fathers.

The true entrepreneurs have the highest percentage of foreign-born and first-generation Americans, followed by the other owners and the business hierarchs. The Collins and Moore entrepreneurs show a considerably higher total percentage than this study while the Warner and Abegglen results agree very well with the business hierarch group.

The nativity of the respondents' mothers was also sought. Twelve percent of the mothers of U.S.-born business hierarchs were born outside the country compared with 24 percent for the true entrepreneurs and 27 percent for the other owners. There appeared to be a greater tendency for business hierarchs to have foreign-born fathers than foreign-born mothers.

<sup>7</sup>Ibid., p. 234.

<sup>8</sup>Warner and Abegglen, op. cit., p. 90.

Table 4.2.--Foreign-born true entrepreneurs, other owners, and business hierarchs and their foreign-born fathers compared with the Collins and Moore Entrepreneurs and the Warner and Abegglen business leaders

Item	True Entrepreneurs	Other Owners	Business Hierarchs	Collins and Moore Entrepreneurs <sup>a</sup>	Warner and Abegglen Business Leaders <sup>b</sup>
Foreign-born U.S.-born with foreign-born fathers	12.4%	3.8%	4.5%	21.0%	5.3%
	27.4	26.6	22.1	35.0	19.7
Total	39.8%	30.4%	26.6%	56.0%	25.0%
Number of Cases	110	79	110	86 and 40	7500

<sup>a</sup>From Table 3 in Orris F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 234.

<sup>b</sup>From Table 34 in W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 90.

The Census Bureau reports nativity of parents in a combined figure showing one or both parents foreign-born. The data from this study were rearranged to reflect the same picture. Table 4.3 shows the incidence of foreign-born respondents plus the incidence of U.S.-born respondents with one or both parents born outside the country. Census data is presented for both the Rochester SMSA and New York State.

Table 4.3.--Foreign-born true entrepreneurs, other owners, and business hierarchs and U.S.-born respondents with foreign or mixed parentage compared with Rochester SMSA census data

Item	True Entre- preneurs	Other Owners	Business Hierarchs	1960 Census Rochester SMSA*
Foreign-born	12.4%	3.8%	4.5%	10.0%
U.S.-born with foreign or mixed parentage	33.1	34.3	29.3	23.1
Total	45.5%	38.1%	33.8%	33.1%
Number of Cases	107	78	109	

\*U.S. Bureau of the Census, United States Census of Population: 1960, I, Part 34, p. 199.

All three groups reported a higher percentage of one or both parents being foreign-born than the Rochester SMSA or New York State. If the total figures for foreign-born respondents plus the native-born respondents with foreign or mixed parentage are looked at, the true entrepreneurs are found to have the highest percentage. The total foreign influence for the three groups is equal to or greater than the influence on the Rochester SMSA. Only the true entrepreneurs exceeded the community percentage of foreign-born but all three groups contained more

U.S.-born with foreign or mixed parentage. The total influence reflected by the true entrepreneurs is a third again higher than the Rochester SMSA.

In summary, there were significantly more foreign-born entrepreneurs than other owners or business hierarchs. The three groups reported similar percentages of native respondents with foreign-born fathers. The true entrepreneurs and other owners had a greater incidence of native respondents with foreign-born mothers than the business hierarchs. Compared with census data, the true entrepreneurs showed a higher incidence of foreign backgrounds than the other groups. It can be concluded that there was a significantly greater foreign influence on true entrepreneurs than on the business hierarchs with the other owners falling in between.

#### Place of Native Birth

The place of birth of the respondents will provide an indication of the geographic mobility from birth and also tell whether business hierarchs and business owners in Rochester and Monroe County tend to be "home-grown" or imported.

Warner and Abegglen studied the question of geographic mobility and found that approximately one third of the business leaders in their sample of about 7,500 persons were living in the state of their birth. Contrasted with the 1940 Census which reported that 77 percent of the U.S. native-born population were residing in the state of their birth, they concluded that business leaders were twice as geographically mobile as the general population.<sup>9</sup>

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<sup>9</sup>W. Lloyd Warner and James C. Abegglen, Big Business Leaders in America (New York: Harper & Bros., 1955), p. 188.



The figures presented in Table 4.4 show that 57 percent of the business hierarchs, 67 percent of the true entrepreneurs, and 86 percent of the other owners living in Rochester or Monroe County at the time of the study were born in New York State. The differences among the groups were highly significant ( $p < .01$ ). According to the 1960 Census, about 74 percent of the total population of Monroe County were born in New York State.<sup>10</sup> On this basis, the business hierarchs and true entrepreneurs exhibited more geographic mobility than the other owners or general population.

Table 4.4.--Place of birth of true entrepreneurs, other owners, and business hierarchs

Place of Birth	True Entrepreneurs	Other Owners	Business Hierarchs
Rochester or Monroe County	37.2%	66.2%	32.7%
Elsewhere in New York State	30.1	20.0	24.6
Elsewhere in the United States	20.3	10.0	38.2
Foreign-born	12.4	3.8	4.5
Total	100.0%	100.0%	100.0%
Number of Cases	113	80	110

Two thirds of the other owners were born in Rochester or Monroe County compared with only one third of the business hierarchs and true entrepreneurs. Looking at Table 4.4 in another light, 43 percent of the business hierarchs were born outside New York State compared with 33 percent of the true entrepreneurs and 14 percent of the other owners.

<sup>10</sup>Computed from U.S. Bureau of the Census, United States Census of Population: 1960, I, Part 34, p. 243.

The high incidence of birth of the other owners in Monroe County and New York State probably reflected the fact that over half of the other entrepreneurs either inherited their business or purchased it from a relative. This indicates much stronger than average community roots.

In her study of Poughkeepsie proprietors, Newcomer found that the birthplaces of the 141 manufacturing proprietors were as follows:<sup>11</sup>

Dutchess County	23.4 percent
Rest of New York State	29.1 "
Elsewhere U.S.A.	24.8 "
Foreign-born	22.7 "
	<u>100.0</u> percent

These figures show a lower percentage for Dutchess County than was found in Monroe County. Monroe County is, however, more than three times larger than Dutchess County. A more reliable comparison would be between the percentages born in New York State. All three groups showed a higher New York State nativity.

The Collins and Moore study of entrepreneurs was conducted in the State of Michigan. The places of birth of the 75 respondents who reported this information were tabulated as follows:<sup>12</sup>

Michigan	43 percent
Great Lakes region	21 "
Elsewhere U.S.A.	15 "
Foreign-born	21 "
	<u>100</u> "

It is rather difficult to compare these results with the present study. Michigan has less than half the population of New York State. The coverage of the "Great Lakes region" is not clear nor does it have a similar category in this study. In discussing "home-grown" entrepreneurs

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<sup>11</sup>Newcomer, op. cit., p. 514.

<sup>12</sup>Collins and Moore, op. cit., p. 235.

versus "imports" Collins and Moore state: ". . . almost two-thirds of our respondents come either from Michigan or surrounding areas. Somewhat better than one-third represent 'imported' talent. Of the imports, about 60 percent were born outside the United States. These figures suggest that, if you want entrepreneurs, you either grow your own or try to attract immigrants."<sup>13</sup>

For the true entrepreneurs, the data from the present study similarly show that two thirds are "home-grown" and one third are "imports." But the data do not agree regarding immigrants. The business hierarchs reported that over 40 percent were imports (of which only a small proportion were foreign-born) while the other owners showed a much higher percentage of "home-grown" and therefore, a much lower percentage of imports.

In summary, the business hierarchs appeared to be the most geographically mobile group. They were not, however, as mobile as the business leaders in the Warner and Abegglen study. The other owners were the least mobile. The true entrepreneurs were moderately mobile.

#### Place of Upbringing

In the Collins and Moore description of the childhoods of their entrepreneurs, one gets a vivid picture of people on the move. To test whether there was, in fact, geographic mobility in the entrepreneur's family of orientation and whether this mobility was significantly greater than that experienced by business hierarchs and other owners, the respondents were asked if most of their childhood had been spent in

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<sup>13</sup>Ibid., p. 235.

their place of birth. This type of question has several limitations. First a negative reply may reflect only one move which cannot really be called drifting. Second, the answer depends on the interpretation of the word "most." Considerable drifting could occur between longer stays at his place of birth and the respondent would have to say that most of his childhood was spent in the place of his birth.

Within these limitations, however, it was hoped to get a rough picture of mobility during childhood. The results showed that 35 percent of the true entrepreneurs did not spend most of their childhood in their place of birth. This compared with 26 percent of the business hierarchs and 17 percent of the other owners. These differences were highly significant at the .01 level. It can tentatively be concluded that the parents of true entrepreneurs moved around the most and that parents of other owners moved the least. The business hierarchs ranked in between. For the other owners, these data once again demonstrated the effect of inheritance and purchase from relatives.

Warner and Abegglen say that the amount and extent of geographic mobility for an individual are related to the size of his birthplace.<sup>14</sup> But isn't the place where most of the childhood is spent more of an influence than the place of birth? Assuming that this is so, respondents were asked to indicate the approximate population of the place where most of their childhood was spent. The category choices were the same as those used in the Collins and Moore research and in the Warner and Abegglen study. The results of this study, as well as the results of these other two studies and comparable census data, are shown in

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<sup>14</sup>Warner and Abegglen, Big Business Leaders in America, p. 188.

Table 4.5. The other two studies have presented data in terms of place of birth. It is difficult to say whether a sizeable difference has been introduced but it is felt that our data are more correct in terms of influence on the individual. We have used 1920 Census data for size distribution comparisons. Since the average ages were just over 50, the average birth year would be near 1920.

The business hierarchs and true entrepreneurs showed only slight differences in size of childhood location. More business hierarchs had rural upbringings than the other groups. Three fourths of the other owners spent most of their childhood in or adjacent to a city of 100,000 to 400,000 inhabitants. The reason for the high frequency in this category was this group's high incidence of birth in Rochester or Monroe County. The differences among the groups were highly significant at the .01 level.

Neither the true entrepreneurs nor the other owners seemed to agree with the Collins and Moore results. They seemed to have a greater tendency to come from the larger cities (and, conversely, a lesser tendency to come from smaller towns and rural areas) than the Michigan entrepreneurs. Of course, the geographical areas are different and a close comparison is difficult because of the relatively few categories employed by Collins and Moore. They qualified their results by stating: "We do not have enough entrepreneurs in our sample who are sufficiently specific about their places of birth to say very much about the size of their communities of origin."<sup>15</sup>

The Warner and Abegglen data do not provide a close comparison with the present study either. It was mentioned earlier that almost

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<sup>15</sup>Collins and Moore, op. cit., p. 235.

Table 4.5.--Size of childhood location of true entrepreneurs, other owners, and business hierarchs compared with size of place of birth for Collins and Moore entrepreneurs and Warner and Abegglen business leaders and the 1920 Census distribution

Size	Warner and Abegglen Business Leaders <sup>b</sup>				1920 Census United States <sup>c</sup>			
	True Entrepreneurs	Other Owners	Business Hierarchs	Collins and Moore Entrepreneurs <sup>a</sup>	Warner and Abegglen Business Leaders <sup>b</sup>	1920 Census United States <sup>c</sup>		
Over 400,000 (or suburb of a city this size)	15.9%	3.8%	13.9%		26%			
100,000-400,000 (or suburb of a city this size)	48.7	76.2	47.2		14			
25,000-100,000	10.6	1.2	5.6	33	12			9.8
2,500-25,000	10.6	13.8	13.9		22			15.6
Rural or less than 2,500	14.2	5.0	19.4	35	26			48.6
Total	100.0%	100.0%	100.0%	100%	100.0%			100.0%
Number of Cases	113	80	108	59	8,000			

<sup>a</sup>From Table 5 in Orris F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 236.

<sup>b</sup>From Chart X in W. Lloyd Warner and James C. Abegglen, Big Business Leaders in America (New York: Harper & Bros., 1955), p. 185.

<sup>c</sup>U.S. Department of Commerce, Statistical Abstract of the United States, 1930, p. 47.

twice as many of the business hierarchs were born in their present state of residence (New York) than Warner and Abegglen found in their national study. This fact could be expected to affect the size of place where most of the hierarchs' childhoods were spent.

Warner and Abegglen found that "the typical business leader is not born in a small town but in a large city."<sup>16</sup> This result was certainly borne out in the present study. Well over half of the sample was born in a city of 100,000 persons or more. Only 26 percent of the U.S. population in 1920, lived in cities of this size. Almost half of the total 1920 population lived in rural areas compared with 5 percent to 20 percent of the sample. The speed with which the United States has changed from a rural to an urban nation complicates the problem of comparing studies done fifteen or twenty years apart.

#### Father's Attainment

In this section two areas which have important effects on the child's development will be discussed--father's education and father's occupation.

Father's education.--Very often, a child's attitude toward formal education is something that is "learned" from his parents and particularly from his father. A parent usually expresses opinions about education. Such opinions may be evident in expressions such as "What's good enough for your father is good enough for you," or they may be in the form of constant reminders about the importance of education. Whatever the parents' values about education--whether positive, negative, or

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<sup>16</sup>Warner and Abegglen, Big Business Leaders in America, p. 186.

indifferent--they are transmitted to the child. In order to appreciate the educational achievements of the respondents, the attainments of their fathers must be first explored. Table 4.6 shows the education of the fathers of the respondents along with comparable data from the Warner and Abegglen study of business executives and the O'Donovan study contrasting lower managers and executives. (The Collins and Moore study of entrepreneurs did not report father's education.)

The fathers of business hierarchs achieved the highest educational levels. More attended or graduated from college than in either of the other groups. The percentages of those having less than a high school education tell the story. Close to 60 percent of the fathers of true entrepreneurs never attended high school. This can be compared with 44 percent of the fathers of other owners and less than 30 percent of the fathers of business hierarchs. The differences among the three groups were highly significant at the .01 level. Clearly, the business hierarchs came from the most educated backgrounds and the true entrepreneurs came from the least educated backgrounds.

The Warner and Abegglen data was collected almost fifteen years ago. One would expect their results to show a somewhat lower level of educational achievement among fathers than would be found today. At the high end of the scale, there is very little difference in the percentages of fathers of the present business hierarchs and the fathers of the Warner and Abegglen business leaders attending or graduating from college. The difference is most obvious in the "less-than-high-school" and "high-school-graduate" categories. More of the fathers of business leaders did not attend high school and fewer graduated from high school than the fathers of the present business hierarchs.



Table 4.6.--Education of fathers of true entrepreneurs, other owners and business hierarchs compared with the Warner and Abegglen business leaders and the O'Donovan executives and lower managers

Education	True Entre- preneurs	Other Owners	Business Hierarchs	Warner and Abegglen		O'Donovan	
				Business Leaders <sup>a</sup>	Business Leaders <sup>a</sup>	Executives <sup>b</sup>	Lower Managers <sup>b</sup>
Less than high school	57.4%	43.6%	27.7%	38%	38%	29%	55%
Some high school	13.9	12.8	15.7	16	16	17	15
High school graduate	11.1	16.7	25.9	18	18	24	12
Some college	5.6	14.1	10.2	10	10	11	7
College graduate	12.0	12.8	20.5	18	18	18	5
Total	100.0%	100.0%	100.0%	100%	100%	99%	94%
Number of Cases	108	78	108	7500	7500	NA	NA

<sup>a</sup>From Table 41 in W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 100.

<sup>b</sup>From Table 11 in Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 59. (Data do not show the "no answers.")

The O'Donovan sample of executives is almost identical to the business hierarch group. The sample of lower managers (first- and second-line supervisors) is very similar to the group of true entrepreneurs. The true entrepreneurs and the lower managers seemed to have been raised in the same educational environments, yet they chose different career orientations.

Before conclusions are made about what appears to be a low level of education for the fathers of the entrepreneurs and other owners, the data for the educational achievement of the general community should be investigated. Less than 13 percent of the adult males (25 years old and over) in the Rochester SMSA in 1960 were college graduates. Business owners do not differ in this respect from other groups in the community. Thirty-four percent of the Rochester adult males were in the "less-than-high-school" category.<sup>17</sup> This is considerably less than found for the entrepreneurs' fathers.<sup>18</sup>

Father's occupation.--An individual's values are typically acquired early in life. They are transmitted by the parents throughout child-rearing. A family's values reflect the values of the social group

<sup>17</sup>Computed from U.S. Bureau of the Census, Census of Population: 1960, I, Part 34, p. 362.

<sup>18</sup>To be more accurate the father's education should be compared with census data for 1920. The Census Bureau, however, did not begin accumulating data on educational attainment until 1940. The 1940 figures for Monroe County adult males (25 years old and over) show that 57 had less than a high school education. Four percent had some college and almost 7 percent had college degrees. Compared with these figures, more of the entrepreneurs' fathers attended or graduated from college while the same percentage had less than a high school education. If the figures were available for 1920 or 1930, it can be assumed that they would show even more emphatically that the fathers of the respondents were better educated than the general community. (Computed from U.S. Department of Commerce, Sixteenth Census of the United States: 1940. Population., II, Part 5, p. 39.)

to which the family belongs. A family's socioeconomic status is a rough determinant of social class and the socioeconomic level of a family is determined to a large extent by the occupation of the father. Table 4.7 presents the principal occupations of the respondents' fathers with comparable data from Collins and Moore and from Warner and Abegglen.

One third of the true entrepreneurs came from a laboring background. This can be compared to 18 percent of the business hierarchs and 24 percent of the other owners. More business hierarchs than business owners tended to come from farm backgrounds. The business hierarchs also had a greater tendency than the business owners to come from a family where the father was a minor executive, a major executive, or a professional man. Close to one half of the fathers of other owners were owners of small businesses. Thirty percent of the true entrepreneurs and 25 percent of the business hierarchs reported that their fathers were small business owners. The differences presented in Table 4.7 were statistically significant at the .05 level.

Through a further analysis of the other owners, it was found that four fifths of those reporting their father's occupation as small business owners got into business ownership themselves through inheritance or purchase from relatives. This same subgroup accounted for all the professional fathers, most of the white-collar group (clerks or salesmen), but none of the unskilled or semiskilled laborers.

One in five of the Collins and Moore entrepreneurs came from a farm background which was twice the incidence found in the entrepreneur group. About 30 percent of the fathers of the Collins and Moore entrepreneurs were blue-collar workers. This agrees favorably with the present entrepreneurs. More of the present group came from skilled

Table 4.7.--Principal occupations of the fathers of true entrepreneurs, other owners, and business hierarchs compared with the Collins and Moore entrepreneurs and the Warner and Abegglen business leaders

Occupation	True Entrepreneurs	Other Owners	Business Hierarchs	Collins and Moore Entrepreneurs <sup>a</sup>	Warner and Abegglen Business Leaders <sup>b</sup>
Unskilled or semiskilled laborer	12.5%	6.4%	7.3%	18%	5%
Skilled laborer	20.5	17.9	10.9	12	10
Farmer	4.5	1.3	10.0	19	9
Clerk or salesman	5.4	7.7	8.2	6	8
Minor executive (including foreman)	8.9	7.7	12.7	2	11
Owner of small business	30.4	46.2	24.6	25	17
Major executive	7.1	5.1	10.0	-	15
Owner of large business	1.8	2.6	1.8	1	9
Professional man	8.9	5.1	14.5	10	14
Other	-	-	-	6	2
Total	100.0%	100.0%	100.0%	99	100%
Number of Cases	112	78	110	80	7500

<sup>a</sup>From Table 7 in Orris F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 239.

<sup>b</sup>From Table 1 in W. Lloyd Warner and James C. Abegglen, Big Business Leaders in America (New York: Harper & Bros., 1955), p. 25.

blue-collar backgrounds, however. Few of the fathers of their entrepreneurs were minor executives and none were major executives. Twenty-five percent of the fathers of the Collins and Moore entrepreneurs were small business owners. The same percentage of the present business hierarch group and a slightly higher percentage of the true entrepreneurs came from this kind of background.

The business hierarchs and the Warner and Abegglen business leaders are fairly similar in most categories with respect to father's occupation. Fewer business leaders came from small-business-ownership backgrounds but more came from homes of major executives and large business owners.

Newcomer categorized her data on father's occupation in a slightly different manner than the other studies cited. The occupations of fathers of her manufacturing respondents were:<sup>19</sup>

Head of son's firm	21.8 percent
Other proprietors (including farmers)	42.8 "
Professional	6.8 "
White-collar employees	3.8 "
Manual workers	24.8 "
	<u>100.0</u> percent

These findings agree generally with the other owner group. The incidence of inheritance or purchase from father was separately tabulated. (Fifty-four percent of the other owner group in the present study either inherited their present business or purchased it from relatives.)

In summary, the business owners had a greater tendency to come from blue-collar or small-business-ownership backgrounds while the business hierarchs had a greater tendency to have their origins in executive or professional backgrounds.

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<sup>19</sup>Newcomer, op. cit., p. 517.

### The Family of Orientation

This section will deal with two aspects of the family of orientation. First, the size of the family will be looked at and then the respondents' position among siblings in the family.

Size of family.--Within limits, there is a rough correlation between socioeconomic status and family size. Presumably, the higher the socioeconomic status, the fewer the number of children. Since occupation approximates socioeconomic status, the business owners, and particularly the true entrepreneurs, would be expected to have come from larger families than the business hierarchs. The data for size of family is presented in Table 4.8.

Table 4.8.--Number of children in family of orientation of true entrepreneurs, other owners, and business hierarchs

Number	True Entrepreneurs	Other Owners	Business Hierarchs
1-2 children	30.0%	42.5%	47.3%
3 or more children	70.0	57.5	52.7
Total	100.0%	100.0%	100.0%
Number of Cases	113	80	110

Almost one half of the business hierarchs came from families with one or two children compared with 30 percent of the true entrepreneurs. In fact, 30 percent of the true entrepreneurs came from families having six or more children (compared with less than 20 percent for both the business hierarchs and other owners). Eight percent of the true entrepreneurs came from families of nine or more children. It is obvious

that the true entrepreneurs came from significantly ( $p < .05$ ) larger families than the business hierarchs. The other owners tended to come from families just slightly larger than those of the business hierarchs.

How do these results compare with the average size of families for the entire country? Since the average year of birth of our respondents was 1915, the average family size for 1920 can be used. That year, the average United States family had 4.2 persons or 2.2 children.<sup>20</sup> The families of our business hierarchs averaged 2.1 children and the families of the other owners averaged just over 2.3 children. The family of orientation of the true entrepreneur averaged 3.0 children. Again this difference in family size can be seen.

Position in family.--Respondents were asked to indicate their position among siblings in their family of orientation. The purpose was to see if being the oldest, or the youngest child, or in between might be predictive of career orientation. The results are given in Table 4.9.

Table 4.9.--Position in family of orientation of true entrepreneurs, other owners, and business hierarchs

Position	True Entrepreneurs	Other Owners	Business Hierarchs
Only child	8.8%	10.0%	17.3%
Oldest child	27.4	30.0	37.3
Youngest child	27.4	30.0	20.9
Between oldest and youngest	36.4	30.0	24.5
Total	100.0%	100.0%	100.0%
Number of Cases	113	80	110

<sup>20</sup>U.S. Department of Commerce, Statistical Abstract of the United States, 1930, p. 48.

Business hierarchs were more often only children than were members of either business owner group. A larger percentage of business hierarchs seemed to be the oldest rather than the youngest children in the family. This difference was not found among the business owners. From a purely probabilistic standpoint, the true entrepreneur would have had the greatest chance of being between the oldest and the youngest in the family because he came from a significantly larger-sized family. Why there were almost twice as many "oldest" business hierarchs as there were "youngest" cannot be explained. This may provide an interesting topic for further study. The differences, however, were not statistically significant.

#### Recollections and Impressions of Childhood

Collins and Moore found that entrepreneurs were able to recall their childhood in great detail and with a great sense of drama. "What set their interviews off as distinctive is not objective fact so much as the quality of remembrance, the vividness with which they recall childhood events and the significance they read into their experiences."<sup>21</sup>

The backgrounds of entrepreneurs, according to Collins and Moore, almost always contain a responsibility that was never faced or a crisis that was never met:

Entrepreneurs, as a group, are men who always go on because both in a physical and an emotional sense they cannot go back. They are also, however, men who carry their unresolved pasts with them. . . . We will talk as if the road to entrepreneurship is primarily an escape route. It is often a fleeing from an impossible situation, rather than a striving for a desirable end. It

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<sup>21</sup>Collins and Moore, op. cit., p. 51.



is often an avoidance maneuver and a form of evasive action. It is a way out of a perceived difficulty. . . . This following of an escape route was learned very early in the lives of entrepreneurs.<sup>22</sup>

Collins and Moore were able to detect a number of common themes underlying the biographical data of their entrepreneurs. These were:

1. The escape from poverty.--This is the rags to riches theme used so often in literature. Yet the entrepreneurs use this background of poverty as a reference point. This represents not only the great American dream of getting ahead by hard work and honesty but more important, the development of independence and self-reliance and autonomy and the realization that the world is fiercely competitive.
2. The escape from insecurity.--Their childhoods were characterized by the absence of stable and reliable adult figures.
3. Death and sudden death.--The insecurity, deprivation, and aloneness caused by the loss of one or both parents often leaves an underlying sense of guilt. The future entrepreneur emerges from this traumatic experience as a different person.
4. The parents who went away.--The parent or parents remain alive but are removed either physically or emotionally. The simplest form is the slothful, malicious, or incapable father figure who failed to adequately support the family.
5. The parents who were sent away.--This represented another method of removing the inadequate parent, particularly the father. The typical case is where the child physically leaves the parents.<sup>23</sup>

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<sup>22</sup>Ibid., p. 52.

<sup>23</sup>Ibid., pp. 52-58.

In many of these themes, the child spends at least a part of his childhood without normal parental figures on which to pattern his own behavior. Whatever the case, parental figures are absent at the time the child needs protection and support. From this deprived background, Collins and Moore see the typical entrepreneur emerging. He becomes what he is almost in spite of his background.

Whether some of these experiences were evident in the sample of business owners and whether there was a significant difference between the entrepreneurs and the business hierarchs will be investigated in this section.

Socioeconomic condition.--If the typical entrepreneur views his achievements as a personal rags-to-riches drama or as an escape from poverty, can this theme be uncovered through a questionnaire? The respondents were asked to choose a statement best describing their childhood life. The statements and the results are found in Table 4.10. The respondents attached their own meanings to "poor" and "comfortable."

Table 4.10.--Family economic condition during childhood of true entrepreneurs, other owners, and business hierarchs

Economic Condition	True Entrepreneurs	Other Owners	Business Hierarchs
Poor or poverty stricken	20.4%	12.7%	10.9%
Fluctuated between poor and comfortable	23.9	25.3	18.2
Comfortable or very comfortable	55.7	62.0	70.9
Total	100.0%	100.0%	100.0%
Number of Cases	113	79	110

One in five of the true entrepreneurs described their childhood economic situation as poor or poverty stricken. An additional 24 percent reported a fluctuation between poor and comfortable. Thus 44 percent of the true entrepreneurs reported that they came from families that were poor for some portion of their childhood. Of the other owners, 38 percent experienced some poverty. (More of the other owners who purchased their businesses from non-relatives were found at this end than those getting into business through inheritance or purchase from relatives.) Twenty-nine percent of the business hierarchs also said they experienced some poverty. Over 70 percent of the business hierarchs said they lived comfortably during their childhood compared to 56 percent of the true entrepreneurs and 62 percent of the other owners. The differences, however, were not statistically significant.

Collins and Moore found a much higher incidence of entrepreneurs coming from low socioeconomic backgrounds.

We assessed the economic level of the families of origin from the entrepreneurs' interviews. Almost two-thirds of them described their early family life as poor or even underprivileged. Twenty-nine percent were well off and 6 percent were affluent. Most of them have clearly moved a long way from the somewhat impoverished economic levels of their childhoods.<sup>24</sup>

The present results were not that high and the differences among the three groups were not significant. Either the entrepreneurs in Rochester came from different social origins or the method of seeking this information was not adequate.

Another way to ascertain parents' economic condition is to get some description of the childhood house or the section of town lived in.

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<sup>24</sup>Collins and Moore, op. cit., p. 238.

Again, the respondents were forced to make their own definitions and to attribute their own meanings to the words used. The descriptions and results are shown in Table 4.11.

Table 4.11.--A description of the section of town lived in during most of the childhood period of true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
Better than average	37.1%	49.4%	47.1%
Average	47.8	40.5	35.3
Poorer than average	2.7	6.3	1.8
Rural	12.4	3.8	15.8
Total	100.0%	100.0%	100.0%
Number of Cases	113	79	108

Almost half of the business hierarchs and other owners described their section of town as "better than average," compared with less than 40 percent of the true entrepreneurs. The business hierarchs and true entrepreneurs had a greater tendency to describe their origins as rural. The differences were significant at the .05 level.

Parental presence and authority.--Collins and Moore describe the entrepreneur's childhood as one of insecurity resulting from the absence of stable and reliable authority figures. Childhood also was pictured as being fraught with death or the physical or emotional removal of one or both parents. The incidence of "broken homes" and the expression of parental authority was sought in the questionnaire. One question asked for the marital status of the respondents' parents during their entire childhood. The answers appear in Table 4.12.

Table 4.12.--Status of parents during childhood of true entrepreneurs, other owners, and business hierarchs

Status	True Entrepreneurs	Other Owners	Business Hierarchs
Both alive	77.0%	77.5%	82.7%
One or both died	16.8	15.0	8.2
Separated or divorced	6.2	7.5	9.1
Total	100.0%	100.0%	100.0%
Number of Cases	113	880	110

In over three quarters of the cases, the parents of both business owner groups were alive and lived together during the respondents' entire childhood. The business hierarchs reported a slightly higher percentage. For those whose parents were not together during all of their childhood, it is not known at what age the condition occurred but it is known that some part of childhood was spent under less than ideal conditions. Death was that condition for 17 percent of the true entrepreneurs, 15 percent of the other owners, and 8 percent of the business hierarchs. The frequency of divorce or separation was similar for the three groups.<sup>25</sup> The differences were not significant. No light was shed on the parents who "emotionally left" their children but from the results, the physical causes of broken homes were not statistically significant.

Respondents were also asked to describe the kind of upbringing they had. Differences in the degree of authority used by parents can have a profound effect on children. The choices ranged from very restrictive to very permissive. Table 4.13 presents the results.

<sup>25</sup>Collins and Moore found "surprisingly few incidents of divorce" reported by their entrepreneurs (p. 56).

**Table 4.13.--Parental control of behavior during childhood of true entrepreneurs, other owners, and business hierarchs**

Control of Behavior	True Entrepreneurs	Other Owners	Business Hierarchs
Allowed to run wild	5.3%	2.6%	2.7%
Plenty of freedom but parents interested in activities	53.1	61.5	56.0
Sometimes complete freedom, sometimes very restrictive, without apparent reason	8.8	9.0	11.0
Watched everything but fair about it	30.1	26.9	30.3
Hardly ever permitted to do anything	2.7	-	-
Total	100.0%	100.0%	100.0%
Number of Cases	113	78	109

The responses among the three groups were quite similar and the differences were not significant. Over half felt that they had been given sufficient freedom and that their parents were interested in their activities. Another 30 percent felt that they had been carefully watched but that their parents had been fair about it. One in ten felt that the control exhibited by their parents tended to fluctuate from restrictive to permissive without apparent reason. Twice as many true entrepreneurs as other owners and business hierarchs felt they had been allowed to run wild but the incidences are low. The true entrepreneurs were the only group having any responses to the very restrictive category but that response was low.

The final question to be covered in this area sought a general evaluation of the childhood happiness of the respondents. The results are shown in Table 4.14.

**Table 4.14.--An evaluation of the childhood happiness of true entrepreneurs, other owners, and business hierarchs**

Happiness	True Entrepreneurs	Other Owners	Business Hierarchs
Very happy	31.0%	38.8%	36.4%
Quite happy most of the time	49.5	46.2	44.6
Neither very happy nor very unhappy	14.2	12.5	13.6
A little on the unhappy side	5.3	2.5	5.4
Total	100.0%	100.0%	100.0%
Number of Cases	113	80	110

Again, the responses among the three groups were similar. The differences were not statistically significant. Over 80 percent regarded their childhood as being happy or very happy. A little less than 15 percent felt that their childhood had been neither happy nor unhappy while about 5 percent said that their childhood had been a little on the unhappy side.

Summary.--In this section on childhood recollections and impressions, it was attempted to probe into some of the underlying themes which Collins and Moore found in their entrepreneurs' biographical data. Only one attempt proved out statistically. Significant differences were found relating to the section of town lived in during childhood.

#### Chapter Summary

In this chapter the following hypotheses were investigated:

True entrepreneurs have a greater tendency than the other groups to be either foreign-born or to have been born geographically near their present residence.

True entrepreneurs tend to come from a lower socioeconomic background as measured by fathers' education and fathers' occupations.

True entrepreneurs tend to have had an unhappy childhood which was manifested in terms of economic hardships, broken homes, and strained parental relations.

It was found that there were significantly more foreign-born entrepreneurs than other owners and business hierarchs. The incidence of foreign or mixed parentage for the U.S.-born respondents was similar for the three groups. The total foreign influence on the entrepreneurs seemed to be greater than for the business owners or business hierarchs.

For those born in the United States a high percentage of the respondents were born in Monroe County or New York State. The other owners had the highest incidence of being "home-grown." The effect of inheritance and purchase from relatives is evident in these results. The differences among the three groups were found to be statistically significant but the significance is probably due more to the home-grown effect of the other owners than to the difference between the true entrepreneurs and business hierarchs. A much higher percentage of the business hierarchs were born in New York State than the corresponding figures for the business leaders in the national study of Warner and Abegglen. The desirability of a community may exert an influence on the mobility of persons to or from that community.

The entrepreneurs tended to come from a lower class social origin than the other owners and business hierarchs. The fathers of the entrepreneurs were significantly less well-educated and were employed significantly more in blue-collar and lower level white-collar occupations than the fathers of the other respondents.



The entrepreneurs came from significantly larger families than the other two groups but their impressions and recollections of the economic condition of their families produced no differences. Their recollections of the type of neighborhood lived in reflected a somewhat lower class background than the other owners and business hierarchs.

There were no differences among the three groups with regard to the incidence of broken homes as a result of parents being separated or divorced, or the death of one or both parents. Broken homes caused by emotional factors were not investigated.

No differences were evident among the three groups with regard to the parental control of behavior. The great majority in all groups felt that the parents were fair about their control and interested in their children's activities. The responses were also similar in an evaluation of childhood happiness although close to 20 percent in each group revealed that their childhood had been neither happy nor unhappy or a little on the unhappy side.

Both hypotheses can be considered proved within the limitations noted.

## CHAPTER V

### EDUCATIONAL BACKGROUNDS OF TRUE ENTREPRENEURS, OTHER OWNERS, AND BUSINESS HIERARCHS

One of the fundamental tenets of our early democracy that has persisted through the development of our nation is the right of the individual to equal opportunity. One reason that this principle has survived in fact, in spite of the many fictions around it, is that we have provided the opportunity for higher education to almost all who would seek it and have the capacity to profit by it. Because of the value placed upon education, the demand for it, the recognition given to it, the opportunity to get an advanced education has become one of the great equalizing forces in our social system.

Warner and Abegglen,  
Big Business Leaders in America

In established organizations, occupational success tends to be closely related to educational achievement. There is one area, however, where a man can be successful without a college education--entrepreneurship. By this it is not meant to imply that education is unimportant in business ownership, but rather that a lack of a formal education will not hold a man back to the same degree as it might in a large corporation.

This chapter will deal exclusively with the education of respondents. It will include the level of achievement, specifics of college education, and some impressions and recollections of formal education.

### Educational Achievement

The educational level of achievement is presented in Table 5.1 along with the 1960 Census data for adult males in the Rochester SMSA.

Table 5.1.--The educational achievement of true entrepreneurs, other owners, and business hierarchs compared with Rochester SMSA adult male population

Education	True Entrepreneurs	Other Owners	Business Hierarchs	1960 Rochester Adult Males*
Less than high school	10.6%	3.8%	0.9%	33.9%
Some high school	15.9	11.2	-	22.9
High school graduate	19.5	26.3	3.7	21.5
Some college	25.7	21.2	18.3	9.2
College graduate	15.0	28.8	56.0	} 12.5
Postgraduate study	5.3	6.2	8.3	
Graduate degree	8.0	2.5	12.8	
Total	100.0%	100.0%	100.0%	100.0%
Number of Cases	113	80	109	

\*Computed from U.S. Bureau of the Census, United States Census of Population: 1960, I, Part 34, p. 362.

Over 95 percent of the business hierarchs attended college and more than three quarters received a college degree. In the other owner group, 59 percent attended college and 38 percent received degrees. Looking at the entrepreneurs, 54 percent attended college and 28 percent graduated. More than one fourth of the true entrepreneurs did not have a high school education compared with 15 percent of the other owners and less than 1 percent of the business hierarchs.

The percentages of true entrepreneurs and other owners attending college were almost identical. The true entrepreneurs displayed a

slightly greater tendency to be college dropouts. In fact, almost one half of the true entrepreneurs attending college did not finish compared with just over one third of the other owners.<sup>1</sup>

The data show that the business hierarchs were by far the best educated group and that the true entrepreneurs had the least education. The other owners were slightly better educated than the true entrepreneurs.<sup>2</sup> These differences were highly significant at the .01 level. If education represents the road to success in society, entrepreneurship, for some, seems to offer an alternate route.

This, however, does not mean that business owners are not well educated. The 1960 Census data for adult males in the Rochester SMSA, for example, show that business owners were considerably better educated than the general county population.

The educational levels of the foreign-born respondents should be noted at this point. The true entrepreneurs had the highest proportion of foreign-born--over 12 percent. Almost one fourth of these foreign-born had less than a high school education. Less than half of this group had any college training and only one fifth were college graduates. Mabel Newcomer in her study of proprietors<sup>3</sup> and Warner and

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<sup>1</sup>There seemed to be some similarity between the high college dropout rate for true entrepreneurs and the dropout rate for other owners' fathers. The majority of the other owners entered business through inheritance or purchase from relatives. If it is assumed that in most of these cases the other owners' fathers started these businesses, then the other owners' fathers were true entrepreneurs. This high college dropout rate may be a characteristic of true entrepreneurs.

<sup>2</sup>The business hierarchs were mainly engineers. This is an area of training that has long been associated with university training.

<sup>3</sup>Mabel Newcomer, "The Little Businessman: A Study of Business Proprietors in Poughkeepsie, New York," Business History Review, Vol. 35, Winter 1961, p. 488.

Abegglen in their study of business leaders<sup>4</sup> both noted that the foreign-born in their samples had less education, on the average, than those born in the United States. The result would be a tendency to lower the average educational achievement of the true entrepreneurs in this study. The effect was probably negligible for the business hierarchs and other owners.

For comparative purposes, the educational levels found in several other studies can also be examined. The data from Collins and Moore, Warner and Abegglen, and O'Donovan appear in Table 5.2

The Collins and Moore entrepreneurs were not as well educated as the entrepreneurs in this study but there seemed to be a fairly close relationship.<sup>5</sup> Forty percent of the Collins and Moore sample attended college but only 20 percent graduated. Again, the same high college dropout rate found for the true entrepreneurs and for the other owners' fathers can be seen here.

The Warner and Abegglen business leaders were not as well-educated as the business hierarchs but the distributions are reasonably close. Two explanations for this disparity can be given. First, the Warner and Abegglen study was conducted almost fifteen years prior to

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<sup>4</sup>W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), pp. 104-105.

<sup>5</sup>The Collins and Moore sample was drawn from the State of Michigan while the sample for the present study was drawn from Monroe County, New York. If the educational levels of the State of Michigan and Monroe County in 1960 are compared some differences are noted. Forty percent of the Michigan adult males had less than a high school education compared with 34 percent of the Monroe County adult males. Likewise just over 15 percent had some college training in Michigan compared with almost 22 percent in Monroe County. The implication is that some of the perceived differences in educational levels of entrepreneurs in Michigan and Monroe County may be due to the differences in the general level of educational achievement in those areas.

Table 5.2--The educational achievement of the Collins and Moore entrepreneurs, the Warner and Abegglen business leaders, and the O'Donovan executives and lower managers

Education	Collins and Moore Entrepreneurs <sup>a</sup>	Warner and Abegglen Business Leaders <sup>b</sup>	O'Donovan Executives <sup>c</sup>	O'Donovan Lower Managers <sup>c</sup>
Less than high school	17%	4%	4%	5%
Some high school	19	9	3	14
High school graduate	25	11	7	22
Some college	19	19	21	34
College graduate	} 20	38	33	13
Postgraduate		} 19	16	9
Graduate degree			20	3
Total	100%	100%	100%	100%
Number of Cases	84	7434	178	148

<sup>a</sup>From Table 6 in Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 237.

<sup>b</sup>From Table 39 in W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 96.

<sup>c</sup>From Table 11 in Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 59.

this one. The average educational level of Americans has been steadily rising and the importance of a college education has also increased. Second, the Warner and Abegglen sample was drawn nationally and if the educational levels of adult males in the entire country in 1960 is compared with comparable data for the Rochester SMSA, it can be seen that the present study sample was drawn from a better-educated population. The sum of these two effects will explain most of the differences noted.

Since O'Donovan's research was conducted just a few years ago, the time difference should not be significant. O'Donovan's executive group is similar to the business hierarch group. Both show a very high percentage attending college. Within this percentage, however, more in O'Donovan's group went on for postgraduate study or graduate degrees. The lower manager group (first- and second-line supervisors) seems to be similar to the business owner groups. They exhibit an even higher percentage of college dropouts than found in the present study groups.

Mabel Newcomer also studied the educational achievements of her Poughkeepsie manufacturing proprietors. She found that almost 40 percent had less than a high school education, 39 percent attended or graduated from high school, 19 percent attended or graduated from college, and 2 percent attended graduate school.<sup>6</sup> These figures represent the lowest educational achievement of the studies cited. The research was performed about 10 years prior to the present study.

In summary, the results obtained in this study showed a statistically significant difference in the educational levels of true entrepreneurs, other owners, and business hierarchs. The data generally agrees with the results of several other studies.

#### College Education

The data presented in this section concern the respondents who attended college. This includes 95 percent of the business hierarchs, 54 percent of the true entrepreneurs, and 59 percent of the other owners.

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<sup>6</sup>Newcomer, op. cit., p. 578.

Tables 5.3 and 5.4 present data on the respondents' major field of study in college. The former table includes all those who attended or graduated from college while the latter includes only those who graduated. The major field refers only to study for the bachelor's degree. The "other" category includes majors in agriculture, architecture, education, photography, and printing.

Table 5.3.--Major field of study of true entrepreneurs, other owners, and business hierarchs who attended or graduated from college

Major Field	True Entrepreneurs	Other Owners	Business Hierarchs
Business administration and economics	23.1%	33.4%	6.0%
Engineering	40.4	19.0	76.2
Natural sciences	11.5	16.7	11.8
Social sciences	5.8	7.1	2.0
Humanities	7.7	11.9	2.0
Other	11.5	11.9	2.0
Total	100.0%	100.0%	100.0%
Number of Cases	52	42	101

Eighty-seven percent of the business hierarchs attending college majored in engineering or the natural sciences. This compared with 52 percent of the true entrepreneurs and 36 percent of the other owners. Almost one quarter of the true entrepreneurs and one third of the other owners majored in business or economics compared with 6 percent of the business hierarchs. The business owners had a greater tendency to major in the social sciences, humanities, and other fields. These differences in major fields were highly significant ( $p < .01$ ).



Table 5.4.--Major field of study for bachelor's degree of true entrepreneurs, other owners, and business hierarchs who graduated from college

Major Field	True Entrepreneurs	Other Owners	Business Hierarchs
Business administration and economics	21.9%	40.1%	3.6%
Engineering	50.0	13.3	83.3
Natural sciences	6.3	13.3	5.9
Social sciences	9.4	10.0	2.4
Humanities	6.2	13.3	2.4
Other	6.2	10.0	2.4
Total	100.0%	100.0%	100.0%
Number of Cases	32	30	84

In Table 5.4 the differences were, again, highly significant at the .01 level. By comparing this table with Table 5.3 the major fields of the college dropouts can be ascertained. For the business hierarchs a greater percentage of the dropouts than those who graduated were majoring in business or economics. Likewise, fewer of the dropouts were in engineering but more were in the natural sciences. For the true entrepreneurs a lesser percentage of engineering and social science majors dropped out, while for the other owners fewer of the business and economics majors dropped out of college.

Considering that the business hierarch sample was largely from the Rochester Engineering Society, it was not surprising to see such a high percentage of engineering majors in the group. Half of the true entrepreneurs who graduated from college also majored in engineering compared with only 13 percent of the other owners. Very few business hierarchs majored in business or economics compared with one fifth of the true entrepreneurs and two fifths of the other owners.

Inheritance and purchase from relatives help to explain the differences found in the major fields of study chosen by the other owners and the other two groups. This subgroup accounted for most of the majors in business and economics, the social sciences, and the humanities. These children of business owners had a reasonably certain future before attending college. Their choice of major was probably geared toward business or some other area of interest. There was less pressure to prepare for the unknown. Those who do not have a planned future may gravitate toward a major in engineering because it can provide a solid base for self-employment or employment in an existing organization.

Twenty-five of the respondents indicated they had earned master's degrees. Of the fourteen business hierarchs, ten received degrees in engineering and the other four were in business administration, natural science, education, and law. Nine entrepreneurs earned master's degrees --four in engineering, two in business administration, two in the humanities, and one in natural science. The two master's degrees earned by the other owners were in printing and the humanities.

In his comparative study of executives and lower managers, O'Donovan found that 69 percent of the executives and 25 percent of the lower managers received bachelor's degrees. Seventy-seven percent of the business hierarchs, 38 percent of the other owners, and 28 percent of the true entrepreneurs graduated from college. The groups in this study, therefore, were slightly better educated. The fields of study for the O'Donovan groups were also somewhat different, as seen in Table 5.5.

Close to one half of the executives majored in business or economics while only 20 percent majored in engineering. The majority of the business hierarchs in this study majored in engineering (the high percentage being partly due to the source of the sample). The executives were most similar to the other owner group, which was the only

Table 5.5.--Major field of study of O'Donovan's executives and lower managers graduating from college\*

Major Field	Bachelor's Degree		Master's Degree	
	Executives	Lower Managers	Executives	Lower Managers
No answer	6%	0%	2	0
Business administration	31	30	9	1
Economics	15	8	2	0
Liberal arts	20	5	6	0
Engineering	20	38	8	0
Law	3	3	7	0
Other	5	16	1	3
Total	100%	100%	35	4
Number of Cases	123	37		

\*From Table 13 in Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel Production Administration, Michigan State University, p. 63.

group in our study showing a high incidence of study in business or economics. The number of lower managers graduating from college was small which makes it difficult to make comparisons.

Twenty percent (35 persons) of the O'Donovan executives had master's degrees compared with 13 percent of the business hierarchs. The executive's degrees were evenly distributed among business administration, liberal arts, engineering, and law, while the business hierarchs studied predominantly in engineering. Three percent (4 persons) of the lower managers earned master's degrees compared with 8 percent of the entrepreneurs and 3 percent of the other owners.

It is difficult to draw any conclusions concerning the two studies. The majors of the business hierarchs reflect the manner in

which the sample was chosen. For the lower managers and business owners, the number of cases involved are rather small.

### Recollections and Impressions of Formal Education

Significant differences have already been found in educational achievement between business owners and business hierarchs. These differences, in part, reflect differing attitudes and values toward formal education--attitudes and values internalized in the family of orientation. It was noted earlier that the parents of business owners were not as well educated as the parents of business hierarchs. They may have placed less stress on education and the children, in turn, may have been influenced by their evaluation. If business hierarchs and business owners were asked to look back on their formal education and evaluate what it has meant to them, somewhat different answers would be expected.

The traditional American belief seems to be that a person who leaves high school or college before graduation does so for economic reasons. Collins and Moore found that economic reasons were not the primary reasons for dropping out of school--at least not in the sense of lacking sufficient funds to continue studies.

There is no question that for some of these men economic deprivation and lack of financial support were decisive. For many of them who did not go far in school, however, a more direct cause of dropping out was a feeling of restlessness and of not "getting anywhere." Often coupled with this was failure to play the role of student. In many instances, direct and open conflict with the teacher was the precipitating incident. In other instances, the fledgling entrepreneur concluded that the teacher did not know what he was doing and that little "real" knowledge could be acquired from such people.<sup>7</sup>

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<sup>7</sup>Collins and Moore, op. cit., p. 71.

Collins and Moore describe the decision to jump off the educational escalator in terms of the "precipitating incident." For those who did not finish grade school the precipitating incidents were lack of financial support, lack of support from and a dislike for adult figures, and leaving an educational situation which was pointless in order to enter a work situation which had meaning. These men had rather short childhoods. The entrepreneurs dropping out of high school seemed to do so because of the appearance of a work opportunity. School seemed boring, routine, and meaningless. When something better came along, they jumped at it. Collins and Moore found that those entrepreneurs who stayed on to graduate from high school did so for four reasons. For some, nothing better came along and they stuck it out. For others, high school graduation represented a goal and a ritual--without a high school diploma a man was not fit for the occupational world. Another group stayed on to graduate merely as an incidental aspect of technical training. The final reason for continuing through high school was the necessity of graduating in order to gain a college education.

The reasons for getting a college education were varied. American folklore seems to perpetuate the idea that college for the sons of the poor involves great sacrifice, determination, and courage. Collins and Moore found that this traditional view was only partially correct. Entrepreneurs attended college with widely differing attitudes. Some went to have fun, some because this was the line of least resistance, and others because this was the road to success.<sup>8</sup> Collins and Moore summarize their findings on the entrepreneur and education:

A dynamic interplay of forces either held these men on or pulled them off the educational escalator. On

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<sup>8</sup>Ibid., pp. 95-98.

balance, the tendency for men to get off at an early age lay in no small part in their own intrinsic restlessness, refusal to accept routine, and dislike of adult figures in the world of the student. Although the economic factor was always present, it did not function in the single uncomplicated manner usually attributed to it by American thoughtways. Economic factors tend, rather to operate as precipitating incidents triggering action. The action comes from within these men and it arises from their diffuse but strong drive to escape the intolerable immediate by initiating a line of action leading to an unknown magical figure.<sup>9</sup>

With Collins and Moore findings in mind, an attempt was made to see whether some of the general attitudes and values held by the sample of business owners and business hierarchs could be quantified and to see if significant differences were apparent.

The respondents were asked whether they felt they gained most of their knowledge in school, in the home, from personal experience, or from examples set by others. The results are presented in Table 5.6.

Table 5.6.--Source of most knowledge for true entrepreneurs, other owners, and business hierarchs

Source	True Entrepreneurs	Other Owners	Business Hierarchs
In school	21.2%	25.3%	51.9%
In your home	5.0	5.3	6.6
From personal experience	67.7	62.7	37.7
From examples set by others	6.1	6.7	3.8
Total	100.0%	100.0%	100.0%
Number of Cases	99	75	106

<sup>9</sup>Ibid., p. 98

Over one half of the business hierarchs felt they had gained most of their knowledge in school. Another 38 percent said personal experience was the best teacher. The business owners disagreed. Sixty-eight percent of the true entrepreneurs and 63 percent of the other owners felt that they had gained most of their knowledge through personal experience. Collins and Moore call this the "School of Entrepreneurs" where the neophyte learns by doing or being done in. Only half as many business owners as business hierarchs felt that most of their knowledge had been gained in school. Only a small percentage of the three groups rated the home or examples of others as important sources of knowledge. The differences were highly significant at the .01 level.

There was probably a tendency to define "knowledge" in pragmatic terms, that is, in terms of how it applied to the occupational situation. For many, and particularly the business hierarchs, they would not be where they were today had it not been for their education. For the majority of those owning their own businesses, they had to "learn" by personal experience.

Since there was a marked difference in source of knowledge among the groups, how would the respondents react to the role of formal education? The respondents were given six statements reflecting roles or benefits that might have been derived from their formal education and they were asked to indicate the one that was most important. The results are presented in Table 5.7.

Half of the business hierarchs regarded training for a profession as the most important role or benefit to be derived from formal education. This might be expected since a high percentage of this group were trained as engineers. An additional 20 percent rated personal maturity

Table 5.7.--The most important role of formal education as perceived by true entrepreneurs, other owners, and business hierarchs

Roles	True Entrepreneurs	Other Owners	Business Hierarchs
Training for a profession	35.5%	24.7%	49.6%
Absorbing general cultural knowledge	17.8	15.5	7.3
Developing personal maturity	14.0	24.7	20.2
Becoming socially polished	-	2.6	0.9
Learning the basic tools for communicating with others	29.0	23.4	17.4
Realizing that it's a highly competitive world	3.7	9.1	4.6
Total	100.0%	100.0%	100.0%
Number of Cases	107	77	109

as most important and almost 18 percent felt that learning the basic tools for communicating with others was the most important benefit. For the true entrepreneurs, training for a profession was rated most important by 36 percent, 29 percent favored the learning of basic communication tools and 18 percent rated absorbing general cultural knowledge as the most important. The other owners rated three roles or benefits nearly equal--training for a profession, developing personal maturity, and learning the basic tools of communication. These differences were highly significant at the .01 level.

In an earlier quote from Collins and Moore, it was stated that "in many instances, direct and open conflict with the teacher was the precipitating incident,"<sup>10</sup> and that there was a feeling that the teacher did not know what he was doing. Respondents were asked whether they

<sup>10</sup>Collins and Moore, op. cit., p. 71.



had experienced direct and open conflict with teachers and the results are tabulated in Table 5.8.

Table 5.8.--Incidence of direct and open conflict with teachers by true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
Never	62.2%	65.0%	54.5%
Occasionally	37.8	35.0	45.5
Total	100.0%	100.0%	100.0%
Number of Cases	111	80	110

The majority of all three groups stated that they had never had direct or open conflict with their teachers. The incidence of frequent conflict is negligible. The interesting result is that the business hierarchs, not the business owners, seemed to show the highest incidence of occasional conflict with teachers. The differences, however, were not statistically significant. Within the limitations of the questioning, the conclusion must be drawn that there was no difference in the incidence of conflict with teachers between business hierarchs and business owners.

In another question, respondents were asked to give their general impressions of teachers they had known in terms of their admiration for them. The answers appear in Table 5.9.

The true entrepreneurs and other owners seemed to have had a higher incidence of greatest admiration for all their teachers than the business hierarchs. Over half of the business hierarchs and the other

Table 5.9.--Admiration of teachers by true entrepreneurs, other owners, and business hierarchs

	True Entrepreneurs	Other Owners	Business Hierarchs
Greatest admiration for all of them	14.4%	13.9%	4.5%
Admired many of them	41.5	50.6	55.5
Admired some of them	44.1	35.5	40.0
Total	100.0%	100.0%	100.0%
Number of Cases	111	79	110

owners said they admired many of their teachers compared with 42 percent of the true entrepreneurs. The true entrepreneurs registered a slightly higher percentage than the other two groups who admired only some of their teachers. The differences presented were not statistically significant. Within the limitations of the questionnaire, there appears to be no difference between business owners and business hierarchs regarding impressions of teachers and admiration levels for them.

#### Chapter Summary

The following hypothesis was investigated in this chapter:

True entrepreneurs have a tendency to be less well educated than the other respondents and to view formal education in rather pragmatic terms.

The true entrepreneurs had the lowest educational achievements of the three groups. Over one quarter were not high school graduates. Twenty-eight percent graduated from college compared with 38 percent of the other owners and 77 percent of the business hierarchs. The true entrepreneurs had the highest percentage of college dropouts (25 percent)

of the three groups. The differences in educational levels were highly significant.

Most of the business hierarchs graduating from college majored in engineering as did half of the true entrepreneurs. The largest percentage of other owners majored in business or economics.

Two thirds of the true entrepreneurs and other owners regarded personal experience as the best source of knowledge. Over half of the business hierarchs felt that school was the most important source of knowledge. There were also significant differences in what the three groups perceived as the most important role of formal education. To the business hierarchs, half felt that training for a profession was the most important. A smaller proportion of the true entrepreneurs agreed while a sizeable number felt that learning the basic tools for communication was most important. The other owners were evenly split among training for a profession, developing personal maturity, and learning the basic tools for communicating with others. These results concerning the most important source of knowledge and the most important role of education probably reflect to a certain extent the differing educational attainments of the three groups.

There were no significant differences among the groups regarding general admiration of teachers or conflict with teachers.

The hypothesis tested in this chapter was generally proved.

## CHAPTER VI

### MILITARY EXPERIENCES AND WORK ORIENTATION OF TRUE ENTREPRENEURS, OTHER OWNERS, AND BUSINESS HIERARCHS

The purpose of this chapter will be to examine several areas relating to two additional orientations of business owners and business hierarchs--military experience and work orientation.

#### Military Experience

Collins and Moore did not investigate military service as a part of their study of entrepreneurs. Dr. Thomas R. O'Donovan, however, did include an analysis of service experience in his study of executives and lower managers (first- and second-line managers). O'Donovan found that the higher a man's rank at discharge from service, the higher his subsequent organizational level tended to be.<sup>1</sup>

We found that a high exit rank from the military was far more prevalent among executives than among lower managers. We cannot say that high military achievement causes high occupational mobility for such incumbents, but if a person is "oriented" to handle large issues and gains experience and possibly contacts, it is likely that such a situation should have substantial effect in his later career development.<sup>2</sup>

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<sup>1</sup>Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 87.

<sup>2</sup>Ibid., pp. 91-92.

O'Donovan came to this conclusion on the basis of entrance and discharge ranks and an analysis of individual mobility in the service. This approach seemed to have potential as a differentiating factor.

Service in the armed forces can afford a young man distinct advantages as well as disadvantages over the person who does not serve. The major disadvantage is the loss of time and experience which could be enjoyed in pursuing a high-level organizational position or engaging in a successful independent business venture. Some of the advantages of military service include the opportunity to associate with individuals of other races, creeds, and socioeconomic statuses, the experience of regimentation and subordination, the opportunity to see different parts of the country or the world, and the experience of leadership and authority at a young age. Individual philosophies may well change in an atmosphere in which status symbols are evident and rank has its privileges. Time spent in the service has whetted the appetite of many young men for higher education and the GI Bill, when in effect, has helped them to finance that education.

Less than half of the respondents served in the armed forces. Included were 38 percent of the true entrepreneurs, 39 percent of the other owners, and 46 percent of the business hierarchs. The great majority of these veterans served in World War II, spent between three and four years in the service, and were discharged in 1945 or 1946.

Branch of service.--Respondents were asked to indicate the branch of service in which they served. The results are tabulated in Table 6.1.

The highest percentage in all of the groups served in the army. Over one half of the other owners and business hierarchs served in this

Table 6.1.--Branch of armed services served in by true entrepreneurs, other owners, and business hierarchs

Branch	True Entrepreneurs	Other Owners	Business Hierarchs
Army	39.5%	51.6%	54.9%
Navy	30.2	29.0	35.3
Air Force	25.6	19.4	7.8
Marines	4.7	-	2.0
Total	100.0%	100.0%	100.0%
Number of Cases	43	31	51

branch compared with 40 percent of the true entrepreneurs. About one third of each group were in the navy. A higher percentage of the true entrepreneurs and other owners served in the air force. These differences, however, were not statistically significant.

Entrance and discharge rank.--The entrance ranks of the respondents are presented in Table 6.2, the discharge ranks in Table 6.3.

Table 6.2.--Military rank at entrance into the armed services of true entrepreneurs, other owners, and business hierarchs

Rank	True Entrepreneurs	Other Owners	Business Hierarchs
Less than commissioned officer	90.7%	86.7%	66.7%
Lieutenant or equivalent	9.3	13.3	29.4
Captain (or equivalent) or higher	-	-	3.9
Total	100.0%	100.0%	100.0%
Number of Cases	43	31	51

Table 6.3.--Military rank at discharge from the armed services of true entrepreneurs, other owners, and business hierarchs

Rank	True Entrepreneurs	Other Owners	Business Hierarchs
Less than commissioned officer	65.1%	60.0%	41.2%
Lieutenant or equivalent	23.3	23.3	29.4
Captain (or equivalent) or higher	11.6	16.7	29.4
Total	100.0%	100.0%	100.0%
Number of Cases	43	31	51

Business hierarchs tended to enter the service at a higher rank than business owners. The differences in entrance rank were significant at the .05 level. The critical category is "lieutenant or equivalent." To enter the service at the lieutenant's level or higher, an individual must be a professional (e.g., a doctor or dentist) or must have completed a program in the Reserve Officers Training Corps in college. If it is assumed that the number of professionals was negligible, then the percentage differences would have to lie in those completing the R.O.T.C. program. In order to obtain an R.O.T.C. commission, one has to graduate from college. There should be some correlation, therefore, between college attendance and military rank upon entering the service.

This was actually the case. If the ratio of the percentage of business hierarch veterans who entered the service at a rank of lieutenant or better to the percentage of business hierarchs graduating from college is calculated, the result is .43. If this same ratio is calculated for the combined business owner groups, a figure of .34 is found. It can be seen that a correlation does exist. Therefore, the

perceived differences in military rank tended to be a function of the number graduating from college in each of the groups rather than from some other differences among the groups.

The discharge ranks show that 65 percent of the true entrepreneurs and 60 percent of the other owners were discharged from the service holding a rank of less than a commissioned officer. In contrast, close to 60 percent of the business hierarchs held ranks of lieutenant or higher at discharge. The data, however, were not statistically significant.

Comparable entrance and discharge ranks were tabulated by O'Donovan. His findings appear in Table 6.4.

Table 6.4.--Military rank at entrance and discharge for the O'Donovan executives and lower managers\*

Rank	Entrance Rank		Discharge Rank	
	Executives	Lower Managers	Executives	Lower Managers
Less than commissioned officer	66%	93%	24%	72%
Lieutenant or equivalent	32	7	31	14
Captain (or equivalent) or higher	2	-	45	14
Total	100%	100%	100%	100%
Number of Cases	93	70	93	70

\*From Table 25 in Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 86.



According to O'Donovan, his respondents served primarily during World War II, most were discharged in or around the year 1946 and most served about three years.<sup>3</sup> This makes his sample almost identical to the present study sample. The executives in O'Donovan's study entered the service at similar ranks to the business hierarchs. Their discharge ranks, however, were higher. The business owners entered the service at about the same rank as the O'Donovan lower managers but were discharged at higher ranks. The result is that O'Donovan found very highly significant differences<sup>4</sup> between the exit ranks of his two groups while the present results were not significant. The reason for these divergent results is not known.

It must be remembered that the business hierarchs were mainly engineers while only one fifth of the O'Donovan executives majored in engineering. The executives represent the upper echelons of several large corporations which puts them generally higher hierarchically than the business hierarchs. The average age of the executive group is about five years younger than the business hierarch group. The executives have climbed higher and faster organizationally than the business hierarchs. They went further in the armed services, too.

The reverse argument may help to explain the differences between the lower managers and the business owners. In this case, the business owners have displayed more ambition. They also achieved a higher rank in the service.

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<sup>3</sup>Ibid., p. 81.

<sup>4</sup>O'Donovan's data had a computed chi square value of 121.29 while anything exceeding 9.21 would have shown significance at the 1 percent level.

Military mobility.--O'Donovan also compared the service mobility of his two groups. To do so, he presented a table showing percentages of "no mobility," "some mobility," and "high mobility." Unfortunately, he did not explain how he defined these terms. On the basis of this analysis, he concluded that "twice as many lower managers as executives experienced no military mobility, and almost twice as many executives as lower managers achieved high mobility."<sup>5</sup>

An attempt was made to derive some military mobility figures for this study. The list of equivalent ranks for all of the services was first broken down into nine categories. The major criterion for these category breakdowns was the difficulty of being promoted from one rank to the next. Promotions based more on seniority than merit (e.g., from second lieutenant to first lieutenant) were grouped together. In this schema, "no mobility" existed when the individual did not change categories between entrance and discharge, even though he may have been promoted within that category. "Some mobility" was arbitrarily set at one or two category changes. "High mobility" included changes of three or more categories. Table 6.5 presents the results of these efforts.

Table 6.5.--Military mobility of true entrepreneurs, other owners, and business hierarchs

Mobility	True Entrepreneurs	Other Owners	Business Hierarchs
No mobility	34.9%	25.8%	27.4%
Some mobility	37.2	48.4	47.1
High mobility	27.9	25.8	25.5
Total	100.0%	100.0%	100.0%
Number of Cases	43	31	51

<sup>5</sup>O'Donovan, op. cit., p. 85.

The differences were not significant. The business hierarchs and the other owners appeared to have had very similar mobilities. The true entrepreneurs had the highest percentage with no mobility but also the highest percentage demonstrating high mobility. A distinction among the groups, such as the one O'Donovan found, was not in evidence.

In summary, the business hierarchs tended to enter the service at a somewhat higher rank than the business owners but this seemed to be proportional to the amount of education. Once in the service, mobility rates did not appear to differ among the three groups.

### Work Orientations

In this section, the interfirm movements of the respondents will be discussed as well as some of the attitudes toward work expressed by the respondents.

Job movement.--Collins and Moore described a course in their fictional "School for Entrepreneurs," which was entitled "drifting." This course was characterized by moving around from job to job and from place to place. The entrepreneur evidently was looking for something, but he was not quite sure what it was. The grass seems to be greener somewhere else. For example, one entrepreneur is quoted as saying:

Well, when I got out of school, there was no job. A younger friend of my dad was making a stab at getting started. He had a gas station, and I went to work for him doing odd jobs. I worked on a commission basis and for the first week I remember I made \$2.50, so I kept looking. Finally I got a job as an apprentice. I worked on this job for a year. I liked it very much, but it was not what I wanted. I started looking around for a job in a machine shop. I finally found a job in a company which manufactured railroad valves --that I liked. I stayed about a year, at which time I thought I was at the end of my rope. Judging from what the older men were doing and how long it took them to get there, I felt I was at the end, so I quit without having a job. This was about

1937--I was nineteen at the time. I tried another job. I wanted at that time to get into the tool room but I couldn't. I stayed only about three weeks because the job was partially production work. I left and went home and told the folks, "I quit and I'm going to Detroit." They weren't very happy.

So I went to Detroit. I got into a company where I worked for two months on surface grinding, but there was a recession about this time and there was a slump--they started laying off. Finally, I was laid off; I didn't know what to do. In the meantime I had two cousins working in Akron. I had been there and I liked the town. I decided to go there, and I got a job at Zenith. I got a job in the tool room. After a few months, the same thing happened as before. One of my cousins was laid off before I was, so we all packed up and came back home where I applied for unemployment compensation, but I never did draw any because I located another job as a stockroom helper.<sup>6</sup>

Collins and Moore viewed this drifting as part of the entrepreneur's "education." It was a process in which the entrepreneur learned all he could about people, about a job, about a given situation. In a sense, the entrepreneur moved around from "grade" to "grade" and when he finally received his "diploma" he was, hopefully, ready to be an entrepreneur. Obviously, this is a simplified description of a very complex process. Some leave "school" before they are ready and others are never ready. Collins and Moore explained that the price of this education was high. The entrepreneur, while going through this stage gives the impression of a shiftless and unreliable worker. This often has reverberations in the entrepreneur's family life. In these days of increased emphasis on stability and seniority, the future entrepreneur following this course can hardly avoid deprecatory labels and chastisement.<sup>7</sup>

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<sup>6</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), pp. 102-103.

<sup>7</sup>Ibid., pp. 100-132.

The most meaningful measure of drifting would be the amount of interfirm shifting that has taken place during the full-time occupational careers of the respondents. The number of firms worked for (including the present firm or organization) are presented in Table 6.6. Also included are comparable data for the Warner and Abegglen business leaders and the O'Donovan executives and lower managers.

The occupational careers of 43 percent of the business hierarchs have been limited to one company. Only 15 percent of this group have worked for four or more firms in their occupational lifetime. The other owners exhibit a little more job movement. Less than 25 percent have worked for only one company and 31 percent have worked for four or more firms in their careers. The true entrepreneurs showed the most job movement. Only 11 percent have worked for one company. Since they also owned that company, this group experienced no period of drifting. Their first job was an entrepreneurial venture. On the other hand, over 51 percent have worked for four or more firms. Over 18 percent have worked for six or more firms. These differences were highly significant ( $p < .01$ ).

There seemed to be a very strong tendency for the business hierarchs to remain with their first employer. The Warner and Abegglen business leaders exhibited somewhat more job movement than the business hierarchs. The business leaders seemed more similar to the other owners. The entrance into business through relatives had an effect on these movements. The typical other owner had a tendency to either enter the family business immediately or to take a job with another firm to gain business experience before entering the family business. The O'Donovan executives also appeared to be more similar to the other owners in

Table 6.6.--Number of firms worked for by true entrepreneurs, other owners, and business hierarchs compared with the Warner and Abegglen business leaders and the O'Donovan executives and lower managers

No. of Firms	True Entrepreneurs	Other Owners	Business Hierarchs	Warner and Abegglen			O'Donovan Lower Managers <sup>b</sup>
				Business Leaders <sup>a</sup>	O'Donovan Executives <sup>b</sup>		
1 firm	11.0%	23.8%	42.8%	25%	21%		19%
2 firms	15.6	23.8	19.1	23	24		16
3 firms	22.0	21.1	23.6	22	26		24
4 firms	18.3	17.5	3.6	13	11		14
5 firms	14.7	5.0	5.5	7	7		10
6 or more firms	18.4	8.8	5.4	10	11		17
Total	100.0%	100.0%	100.0%	100%	100%		100%
Number of Cases	109	80	110	7476	178		148

<sup>a</sup>From Table 62 in W. Lloyd Warner and James C. Abegglen, Occupational Mobility in American Business and Industry (Minneapolis: University of Minnesota Press, 1955), p. 127.

<sup>b</sup>From Table 34 in Thomas R. O'Donovan, "Contrasting Orientations and Career Patterns of Executives and Lower Managers," unpublished Ph.D. dissertation, Dept. of Personnel and Production Administration, Michigan State University, p. 99.

interfirm movements than the business hierarchs. The O'Donovan lower managers appeared to be somewhere in between the other owners and the true entrepreneurs in job mobility.

Warner and Abegglen suggested that a correlation exists between the movement from one firm to another and the respondent's education and the occupation of his father. They concluded that:

Men from lower status occupational backgrounds tended to move from one firm to another more frequently than those from business backgrounds, and college graduates were less likely to move between firms as they went on to top business positions than men with less formal education.<sup>8</sup>

The results of the present study would seem to confirm this hypothesis. In both education and father's occupation, the business hierarchs ranked highest, followed by the other owners, and then by the true entrepreneurs. The most interfirm movement was shown by the true entrepreneurs and the least by the business hierarchs. On the other hand, the O'Donovan results did not seem to support the hypothesis. There were significant differences between the O'Donovan groups in education and father's occupation but no significant difference in interfirm movement.

Attitudes toward work.--Collins and Moore suggested that business hierarchs and entrepreneurs have differing approaches to their work and that they derive different products and by-products from their work. This comparison, made from their depth interviews with entrepreneurs and from the reported studies of Warner and Abegglen, Henry, O'Donovan, and Riesman, pointed out some of these differences:

Entrepreneurs and business hierarchs appeared to work in quite different ways. The hierarch channeled his energies

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<sup>8</sup>Warner and Abegglen, Occupational Mobility in American Business and Industry, p. 128.

into his work. He seemed to gain satisfaction from accomplishment. This love of work might well explain why the successful executive stayed put and narrowed his pursuits and interests to one organization and one occupational area. Our entrepreneurs apparently did not love their work in the same way. While they thought of themselves as hard working and suffered from a chronic sense of fatigue, they probably worked sporadically. More important than this, they very likely had a sense of restlessness and a desire to move on to new fields of endeavor.<sup>9</sup>

In an attempt to determine whether the entrepreneur does suffer from chronic fatigue, respondents were asked to choose a statement which best described the effect of their work. The results are found in Table 6.7.

Table 6.7.--The tiring effect of work on true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
Tiring to some degree	48.1%	64.6%	57.3%
Not tiring	51.9	35.4	42.7
Total	100.0%	100.0%	100.0%
Number of Cases	110	79	110

The differences were not statistically significant. The data did not show that the entrepreneurs tended to suffer from chronic fatigue. At least the entrepreneurs did not think of their work as overly tiring. From the responses, it appears as if the business hierarchs and other owners viewed work as more tiring than the true entrepreneurs.

<sup>9</sup>Collins and Moore, op. cit., p. 240.



Collins and Moore also suggested that entrepreneurs tend to work in a sporadic manner.<sup>10</sup> This implies that they react to varying pressures which force them to work at a feverish pitch sometimes and at a very low level of activity at other times.

Respondents were asked under which conditions they felt they worked best. The choices and responses to their preferred conditions appear in Table 6.8.

Table 6.8.--Preferred work habits of true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
Work best on a regular schedule, whether under pressure or not	42.7%	43.0%	38.5%
Work best under pressure	37.3	31.7	35.8
Work best when in the mood, whether under pressure or not	20.0	25.3	25.7
Total	100.0%	100.0%	100.0%
Number of Cases	110	79	109

The differences among the three groups were not statistically significant. About 40 percent reported working best on a regular schedule. Slightly more than one third felt they worked best under pressure and the remaining 25 percent worked best when in the mood, regardless of the pressure.

The preferred work habits among the three groups did not differ. The actual work habits imposed upon the respondents by the nature of

<sup>10</sup>Ibid.

their jobs were not determined. This analysis must be left for another study.

Respondents were also questioned on their general attitudes toward work. They were asked to indicate what they felt was the most important feature of a job. The answers are shown in Table 6.9.

Table 6.9.--The most important feature of a job as perceived by true entrepreneurs, other owners, and business hierarchs

Item	True Entrepreneurs	Other Owners	Business Hierarchs
The enjoyment of work itself	51.8%	41.0%	58.7%
The kind of work actually done	31.8	34.6	29.3
The money earned and security offered	16.4	24.4	12.0
Total	100.0%	100.0%	100.0%
Number of Cases	110	78	109

The highest percentage in each group rated the "enjoyment of work itself" as the most important feature of a job. Almost 59 percent of the business hierarchs felt this way compared with 52 percent of the true entrepreneurs and 41 percent of the other owners. The business hierarchs and true entrepreneurs tended to care less than the other owners about the money earned and the security which a job offered. About one in three of each group felt that the "kind of work actually done" was the most important feature of a job. These differences were significant at the .05 level.

Summary.--The true entrepreneurs have worked for a significantly larger number of firms in their occupational careers than either the business hierarchs or the other owners. There was apparently no differ-

ence among the groups concerning the tiring effect of work or the preferred degree of pressure on the job. The groups had significant differences regarding the most important features of a job. All three groups reported that the enjoyment of work itself was most important but the business hierarchs felt that this was significantly more important than the other owners. The other owners felt more strongly than the other groups about the money earned and the security that a job could offer.

#### Chapter Summary

In this chapter the following hypotheses were investigated:

Those entrepreneurs having had military experience tend to have demonstrated less service mobility than the other groups.

True entrepreneurs tend to have experienced greater inter-firm movement during their occupational careers than the other respondents.

True entrepreneurs have a tendency to work more sporadically and find work more fatiguing and less enjoyable than the other groups.

The hypothesis concerning military service mobility from entrance to exit was not proved. There were significant differences among entrance ranks of the three groups with the business hierarchs entering at somewhat higher ranks. This was attributed mostly to R.O.T.C. programs which correlate with college graduation. There were no differences in the exit ranks of the groups. There were also no significant differences in service mobility among the three groups.

There were no differences in preferred work patterns of the respondents but it is not known whether these preferred work patterns were similar to the actual patterns encountered on the job. Testing whether



work was perceived as fatiguing produced no differences among the groups. Slight differences were found concerning the enjoyment of work. The business hierarchs seemed to regard work more importantly for the enjoyment it produced. Fewer entrepreneurs felt that enjoyment of work was the most important feature of a job. Therefore, work patterns were not tested, there were no differences in the tiring effect of work, and the entrepreneurs worked less for the enjoyment of work than the business hierarchs.

The entrepreneurs did do more job-hopping during their occupational careers. The differences among the three groups were highly significant.

## CHAPTER VII

### A COMPARISON OF PSYCHOLOGICAL TEST SCORES FOR TRUE ENTREPRENEURS, OTHER OWNERS, AND BUSINESS HIERARCHS

The relative authoritarianism of the respondents as well as the importance of several values, particularly leadership and independence, will be compared in this chapter. Collins and Moore, in comparing the results of their entrepreneurs with the business hierarch literature found the greatest difference between the two groups in their respective attitudes toward authority.

The most significant difference between entrepreneurs and executives in established organizations was in their attitude toward authority figures and interpersonal relations. The successful business executives had a positive attitude toward authority. There were residual "feelings of dependency upon the father-image and a need to operate within an established framework." The entrepreneur was least effective in his interpersonal relations with authority figures. He was not necessarily hostile toward authority; it was just that he was unable to handle the relationship effectively and without often intolerable emotional tension. As the psychologist put it, "The entrepreneurial personality, in short, is characterized by an unwillingness to 'submit' to authority, an inability to work with it, and a consequent need to escape from it."<sup>1</sup>

Three standardized tests were administered to the respondents-- the Survey of Interpersonal Values, the Dogmatism Scale, and the

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<sup>1</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), p. 240.

Authoritarian Personality Scale. The scores on these tests and the intercorrelations among them will be discussed.

### Survey of Interpersonal Values

The Survey of Interpersonal Values measures six values--Support, Conformity, Recognition, Independence, Benevolence, and Leadership.

Test results.--The results from the SIV are presented in Table 7.1 in the form of means and standard deviations for each of the six value measurements.

Comparisons were made of the mean scores for the true entrepreneurs and the other owners, the true entrepreneurs and the business hierarchs, and the other owners and the business hierarchs. From the means and the standard deviations, the significance of the differences between the sample means of each pair were computed. The following results were found:

1. Support.--Of the three groups, the other owners seemed to value support the most. They showed the greatest need for encouragement and understanding from other people as well as the greatest need for being treated with kindness and consideration. The differences between the sample means of the true entrepreneurs and the business hierarchs were negligible and not significant. The differences, between the means of these two groups and the other owners were highly significant ( $p < .01$ ).

2. Conformity.--This value refers to following rules closely and doing what is accepted, proper, and correct. The differences among the means were not statistically significant. There is no difference,

Table 7.1.--A comparison of Survey of Interpersonal Values scores for true entrepreneurs, other owners, and business hierarchs

Sample	N	Means							Standard Deviations						
		S	C	R	I	B	L		S	C	R	I	B	L	
True entrepreneurs	104	15.0	14.5	12.4	14.0	16.2	17.7		6.68	3.16	2.88	4.24	3.21	2.76	
Other owners	75	16.1	14.1	13.1	13.6	15.3	17.6		2.94	2.93	2.46	4.22	2.77	2.59	
Business hierarchs	109	14.6	14.8	12.4	15.0	16.2	16.7		2.57	2.99	2.50	3.62	2.80	3.09	
<b>Differences</b>															
True entrepreneurs															
vs. other owners		-1.1	0.4	-0.7	0.4	0.9	0.1								
Significance		.01	NS	NS	NS	.05	NS								
True entrepreneurs															
vs. business hierarchs		0.4	-0.3	0.0	-1.0	0.0	1.0								
Significance		NS	NS	NS	.05	NS	.01								
Other owners															
vs. business hierarchs		1.5	-0.7	0.7	-1.4	-0.9	0.9								
Significance		.01	NS	.05	.05	.05	.05								

\*S = Support; C = Conformity; R = Recognition; I = Independence; B = Benevolence; L = Leadership.



therefore, among the three groups regarding the degree to which they value conformity.

3. Recognition.--The other owners scored highest on this dimension which measures the importance of being looked up to and attracting favorable attention. The difference between the means of the other owners and business hierarchs was significant at the .05 level.

4. Independence.--This value is defined as freedom to do what one wants to, freedom to make one's own decisions, and freedom to do things in one's own way. A significant difference was found between the means of the business owner groups and the business hierarchs ( $p < .05$ ). The business hierarchs valued independence the highest.

5. Benevolence.--The true entrepreneurs and business hierarchs scored identically on this dimension which measures the importance of doing things for others, being generous, and helping the unfortunate. These two groups scored significantly higher ( $p < .05$ ) than the other owners.

6. Leadership.--The business owners valued leadership and authority more than the business hierarchs. The difference between the means of the true entrepreneurs and the business hierarchs was highly significant at the .01 level; the difference between the other owners and the business hierarchs was significant at the .05 level.

To gain some perspective of what these scores and their differences mean, the results should be compared with other SIV test findings. In Table 7.2, the mean scores are translated into percentiles based on male college norms ( $N = 1075$ ) provided by Leonard V. Gordon. While the respondents would not necessarily be expected to hold values to the same

degree of importance as college students, such data can indicate the consistency of scores among the three troupes.

Table 7.2.--Percentile scores on the Survey of Interpersonal Values based on college male norms\*

Sample	S	C	R	I	B	L
True entrepreneurs	48	63	47	23	61	49
Other owners	55	61	51	21	57	48
Business hierarchs	44	65	47	27	61	43

\*Norms from Leonard V. Gordon, Manual for Survey of Interpersonal Values (Chicago: Science Research Associates, Inc., 1960), p. 12.

Table 7.2 shows us that the mean scores were generally consistent among the three groups. Compared with college males, the groups scored lower in needs for independence and leadership, higher in needs for conformity and benevolence, and about the same in needs for support and recognition.

Other SIV scores pertaining to similar sample groups are also available. Professors Edwin A. Fleishman and David R. Peters administered the SIV to a sample of group managers and department managers employed by a large soap and detergent manufacturer. A group manager, who reports directly to the plant manager, has from one to four department managers reporting to him; the department manager supervises several line foremen.<sup>2</sup> Dr. Sherwood Peres reported the scores of 80 graduate engineers on their first day of employment at Sandia Corporation.<sup>3</sup>

<sup>2</sup>Edwin A. Fleishman and David R. Peters, "Interpersonal Values, Leadership Attitudes, and Managerial Success," Personnel Psychology, Vol. 15, Summer 1962, pp. 128-129.

<sup>3</sup>Reported in Leonard V. Gordon, Research Briefs on Survey of Interpersonal Values (Chicago: Science Research Associates, Inc., 1963), p. iv.

Scores are also available from Dr. Eric Gunderson for 71 civilian scientists trained primarily as engineers and in supervisory positions.<sup>4</sup> A general male adult sample of 213 persons (average age in the early thirties) was tested by Dr. Ivan Mensh as a control group in a study of psychoneurotics.<sup>5</sup> These scores and their standard deviations are presented in Table 7.3.

Comparing the results of the present study with the scores from these other studies, it is seen that the three groups most closely approximate the general male adult sample used as a control group in the study of psychoneurotics. The other four groups show a fair degree of similarity to one another but are not too similar to the present research groups. The business hierarchs (mainly engineers, many of whom are in managerial positions) would be expected to have scored similarly to the group managers, engineers, or civilian scientists. Actually, the business hierarchs expressed higher needs than these groups for support and benevolence and lower needs for independence and leadership.

Scale intercorrelations.--Intercorrelations among the SIV scales were computed for each of the three sample groups. These matrices appear in Tables 7.4, 7.5, and 7.6. The correlations that were found to be significant at the .01 level are underlined. (The "t" test with n-2 degrees of freedom was used to test the level of significance.)

The intercorrelation matrix tells the degree of relationship between any two scales in terms of the raw scores of the respondents of a given group. A high positive correlation between the two scales would

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<sup>4</sup>Ibid., p. xxii-a.

<sup>5</sup>Ibid., p. vii.

Table 7.3.--Scores on Survey of Interpersonal Values from other studies

Sample	N	Means						Standard Deviations							
		S	C	R	I	B	L	S	C	R	I	B	L		
Group managers <sup>a</sup>	10	12.5	15.7	12.6	16.5	9.8	22.9	3.8	5.2	5.1	5.3	3.7	6.6		
Department managers <sup>b</sup>	25	13.5	17.0	11.6	14.5	12.7	20.5	5.1	6.1	5.5	6.7	6.9	7.1		
Engineers <sup>b</sup>	80	13.1	11.5	11.8	19.4	14.0	20.0	5.4	5.2	5.4	6.0	6.4	6.4		
Civilian scientists <sup>c</sup>	71	13.0	16.4	11.3	14.5	14.2	20.5	4.9	6.3	4.2	6.9	6.5	6.5		
General male adult <sup>d</sup>	213	15.0	14.8	11.2	16.9	15.8	16.1	5.7	6.5	5.2	7.4	5.8	7.7		

<sup>a</sup>From Table 2 in Edwin A. Fleishman and David R. Peters, "Interpersonal Values, Leadership Attitudes, and Managerial Success," Personnel Psychology, Vol. 15, Summer 1962, p. 135.

<sup>b</sup>Reported in Leonard V. Gordon, Research Briefs on Survey of Interpersonal Values (Chicago: Science Research Associates, Inc., 1963), p. iv.

<sup>c</sup>Ibid., p. xxiii.

<sup>d</sup>Ibid., p. vii.

Table 7.4.--Intercorrelation of SIV scales for true entrepreneurs

	S	C	R	I	B	L
Support		<u>-.41</u>	.02	-.16	.01	<u>-.27</u>
Conformity			-.16	<u>-.29</u>	-.12	<u>.03</u>
Recognition				<u>-.29</u>	<u>-.39</u>	-.01
Independence					<u>-.30</u>	<u>-.35</u>
Benevolence						-.16
Leadership						

Table 7.5.--Intercorrelation of SIV scales for other owners

	S	C	R	I	B	L
Support		<u>-.68</u>	.24	<u>-.34</u>	.04	-.13
Conformity			-.25	<u>.12</u>	-.16	-.05
Recognition				<u>-.53</u>	<u>-.12</u>	-.02
Independence					<u>-.39</u>	<u>-.34</u>
Benevolence						-.20
Leadership						

Table 7.6.--Intercorrelation of SIV scales for business hierarchs

	S	C	R	I	B	L
Support		<u>-.50</u>	.22	-.15	-.05	<u>-.30</u>
Conformity			<u>-.28</u>	-.11	-.18	<u>.08</u>
Recognition				<u>-.37</u>	-.20	-.07
Independence					-.12	<u>-.41</u>
Benevolence						<u>-.34</u>
Leadership						

indicate that there is a pattern to the responses of the average individual to these two variables. That is, a person scoring high in one variable would tend to score high in the other. All of the significant correlations are negative.<sup>6</sup>

All three of the sample groups showed significant correlations between three pairs of scales--support-conformity, recognition-independence, and independence-leadership. In addition, the business hierarchs and true entrepreneurs have significant correlations between support and leadership while the true entrepreneurs and other owners have significant correlations between independence and benevolence.

Summary.--The three groups were consistent among themselves on the SIV. Compared with college male norms, the respondents scored significantly higher in conformity and benevolence and significantly lower in independence. Compared with other studies on similar groups, the respondents were most similar to a general adult sample. The business hierarchs, which were mainly engineers, were not very similar to other studies of managers, engineers, or scientists.

Of the eighteen possibilities for paired differences, there were only three that were significant at the .01 level. The other owners scored higher in support than both of the other groups to account for two of these differences. The third one occurred on the leadership scale where the true entrepreneurs scored significantly higher than the business hierarchs. Six additional pairings proved to be significant at the .05 level.

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<sup>6</sup>The author of the SIV tells us that the predominance of negative correlations is due to the interdependence among the scales resulting from the forced-choice format.

The value differences between the true entrepreneurs and the other owners were few. The other owners recorded a greater need for the encouragement, support, consideration, and understanding of others (support); the true entrepreneurs showed a greater need for doing things for others and being generous (benevolence). The value differences between the true entrepreneurs and the business hierarchs were also few. The true entrepreneurs demonstrated a greater need for leadership and power (leadership) while the business hierarchs felt a greater need for independence.

The comparison of the other owners and the business hierarchs revealed differences on five of the six value measurements. (There were no significant differences among any of the groups regarding conformity.)

From the SIV results, the other owners were significantly different from the other two groups in two values. The true entrepreneurs were not different from both of the other two groups in any values. Wherever a difference did exist, the true entrepreneurs were similar to one of the other groups and they both differed from the third group.

The other owners reflected the highest need for support, and the lowest need for benevolence. In other words, the other owners had the greatest need of the respondents for understanding, encouragement, kindness, and consideration and the least desire to share with others, to do things for others, or to be generous.

The business hierarchs reflected the highest need for independence and the lowest need for leadership. The business owners, on the other hand, valued independence lower and leadership higher. The aspects of leadership and authority will be further discussed in connection with the Dogmatism and F Scale results.

In summary, the results indicated that the true entrepreneur tended to more strongly value leadership and benevolence while he less strongly tended to value support, recognition, and independence. The business hierarch had stronger values of benevolence and independence and weaker values of support, recognition, and leadership. The other owner tended to have value strengths directly opposite to those noted for the business hierarch.

#### Dogmatism Scale

It was hypothesized that the entrepreneurs will tend to be more authoritarian than the other groups. The Dogmatism Scale purports to measure the relative openness or closedness of the individual's belief system as well as general authoritarianism. A high degree of dogmatism and authoritarianism would be reflected by a high score on this scale. The means, standard deviations, and significances found for the respondents are presented in Table 7.7.

The results show that both business owner groups scored somewhat higher than the business hierarchs. The differences, however, were not statistically significant. It must be concluded that there were no differences among the three groups regarding relative openness or closedness of belief systems or general authoritarianism.

Since a modified scoring technique was introduced in this research, it is not possible to compare the scores with scores found in other studies. No significant differences were found among the three groups and it cannot be determined whether our respondents scored in a high, medium, or low-authoritarian range.



Table 7.7.--A comparison of Dogmatism Scale scores for true entrepreneurs, other owners, and business hierarchs

Sample	N	Means	Standard Deviations
True entrepreneurs	112	114.3	14.71
Other owners	80	114.6	14.42
Business hierarchs	110	111.9	12.28
<u>Differences</u>			
True entrepreneurs vs. other owners		2.4	
Significance		NS	
True entrepreneurs vs. business hierarchs		2.7	
Significance		NS	
Other owners vs. business hierarchs		0.3	
Significance		NS	

Correlations of the Dogmatism Scale with the six scales of the Survey of Interpersonal Values are presented in Table 7.8.

Table 7.8.--Intercorrelations of Dogmatism Scale and Survey of Interpersonal Values for true entrepreneurs, other owners, and business hierarchs

SIV Scales	Dogmatism Scale		
	True Entrepreneurs	Other Owners	Business Hierarchs
Support	-.18	-.11	-.15
Conformity	.22	.21	.11
Recognition	-.13	-.17	-.05
Independence	.15	.09	-.07
Benevolence	-.03	.00	.10
Leadership	-.14	.00	.06

None of these correlations were significant at the .01 level. Only one correlation was found significant at the .05 level. For the true entrepreneurs, the correlation between the Dogmatism Scale and Conformity was significant at that level.

#### The Authoritarian Personality Scale

This study utilized a shortened form of the F Scale. The means, standard deviations, and significances of the findings are shown in Table 7.9.

Significant differences were found on the modified F Scale. The business owner groups scored higher than the business hierarchs. The

Table 7.9.--A comparison of Authoritarian Personality Scale scores for true entrepreneurs, other owners, and business hierarchs

Sample	N	Means	Standard Deviations
True entrepreneurs	112	40.8	8.03
Other owners	80	39.4	6.97
Business hierarchs	110	36.9	7.33
<u>Differences</u>			
True entrepreneurs vs. other owners		3.9	
Significance		.01	
True entrepreneurs vs. business hierarchs		-1.4	
Significance		NS	
Other owners vs. business hierarchs		2.5	
Significance		.05	

difference between the sample means of the true entrepreneurs and the business hierarchs was highly significant ( $p < .01$ ); the difference between the sample means of the other owners and the business hierarchs was significant ( $p < .05$ ).

Researchers have found that F Scale scores do not tend to be independent of other factors. Among the more important factors which could affect F Scale scores are age, sex, social class, education, and region of country covered. Respondents in the present study can be regarded as being homogeneous with regard to age, sex, and region of country. In social class and education, they were definitely heterogeneous. Herbert C. Kelman and Janet Barclay found an inverse relationship between F score and father's occupation in a sample that was educationally homogeneous.

F scores are lowest among the subjects whose fathers are in professional, business, or managerial occupations. Children of semiskilled and unskilled laborers and of farm operators have the highest F scores.<sup>7</sup>

The true entrepreneurs came from significantly lower social origins than the business hierarchs. According to Kelman and Barclay, the entrepreneurs could be expected to score higher than the business hierarchs on the F Scale on the basis of their social backgrounds.

Professor Ned A. Rosen, who devised the modified F Scale, has used it in several studies. The results of the present study can be compared with his results to determine whether the groups could be classified generally as high- or low-authoritarian. As a part of a laboratory study of supervisory patterns, 160 college students were given the

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<sup>7</sup>Herbert C. Kelman and Janet Barclay, "The F Scale as a Measure of Breadth of Perspective," Journal of Abnormal and Social Psychology, Vol. 67, December 1963, p. 613.

modified F Scale. The mean score of the high-authoritarian group was 33.5; the mean score for the low-authoritarians was 23.5. The factors of age and education were homogeneous.

This modified F Scale is also being used in the development of a new management inventory. The mean score for a group of 360 men in all levels of management was found to be 39.9. This group is heterogeneous with respect to education and social background. Compared to the college student sample, managers tended to be more authoritarian.<sup>8</sup>

From the Rosen results, it can be seen that the present study groups agree closely with the managerial group and that they all were relatively high in authoritarianism.

Investigating the factor of education, Richard Christie examined four studies that were essentially homogeneous with respect to age, sex, and region of the country. The correlations between F Scale score and education ranged from  $-.45$  to  $-.54$ . These correlations were all significant. They mean that, all other things equal, the higher the educational level, the lower the F Scale score will tend to be.<sup>9</sup> In the present study, the business hierarchs were found to have had a significantly higher education than the true entrepreneurs and the other owners. Therefore, they could be expected to be less authoritarian than the business owners on the basis of their educational attainments.

The heterogeneity of social origins and educational attainments both point toward a higher level of authoritarianism for the business

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<sup>8</sup>This information was obtained through discussions with Professor Ned A. Rosen, New York State School of Industrial and Labor Relations, Cornell University.

<sup>9</sup>Richard Christie, "Authoritarianism Re-Examined," in Richard Christie and Marie Jahoda, eds., The Authoritarian Personality (Glencoe, Ill.: The Free Press, 1954), pp. 169-171.

owners. All three of the groups scored high in authoritarianism but the business owners were significantly more authoritarian than the business hierarchs.

Table 7.10 presents the intercorrelations among the F Scale, Dogmatism Scale, and Survey of Interpersonal Values. The correlations with significance at the .01 level are underlined.

Table 7.10.--Intercorrelations of the Authoritarian Personality Scale with the Survey of Interpersonal Values and Dogmatism Scale for true entrepreneurs, other owners, and business hierarchs

Scales	Authoritarian Personality Scale		
	True Entrepreneurs	Other Owners	Business Hierarchs
SIV Scales			
Support	-.11	-.07	-.10
Conformity	<u>.33</u>	.16	.22
Recognition	<u>-.26</u>	-.22	-.07
Independence	<u>-.05</u>	-.09	-.16
Benevolence	.05	.16	.17
Leadership	.02	.11	-.02
Dogmatism Scale	<u>.63</u>	<u>.64</u>	<u>.50</u>

A strong positive correlation appeared between the F Scale and the Dogmatism Scale for all three groups. A high correlation between the two scales has been found in other studies.<sup>10</sup> It cannot be explained why there were no differences among the groups in a test of general authoritarianism and significant differences in a test of right-of-center or fascistic authoritarianism. Some other variable may be affecting the results.

<sup>10</sup>For example, a highly significant correlation of .70 between the two scales was reported in Edward Lichtenstein, et al., "Dogmatism and Acquiescent Response Set," Journal of Abnormal and Social Psychology, Vol. 63, November 1961, p. 637.

The other correlations were significant at the .01 level and both occurred for the true entrepreneurs. A positive correlation was found between the F Scale and the Conformity value of the SIV; a negative correlation was found between the F Scale and Recognition.

### Chapter Summary

This chapter has examined the following hypothesis:

True entrepreneurs tend to be more authoritarian than the other respondents.

From the Survey of Interpersonal Values, it was found that the business hierarchs valued independence more than the true entrepreneurs and the business owners. Independence is defined as freedom to do things in one's own way.

The business owner is usually thought of as being very independent--he supposedly can do business the way he wants to, keep whatever hours he desires, etc. The person who works for someone else does not have this independence of action. But the situation can be analyzed in another manner. In one sense, the entrepreneur has independence of action only in long-term decisions. Once he has committed himself to his business, he loses his independence. His method of operation and even his hours are dictated to a large extent by his vendors and his customers. For the typical business owner, there is no better alternative to his present operation. Because of his background and education, he tends to be marginal to existing organizations. Business ownership may represent the only road open to occupational success.

The business hierarch, on the other hand, is generally high enough in the hierarchy to be able to visualize the operation of the

total company. He may view himself not as dependent on the organization but rather as a part of the managerial group which operates the company. In this sense, he sees himself as making decisions and taking actions which greatly involve the company.

In a personal sense, the business hierarch is occupationally independent. The business hierarchs in this study were trained mainly as engineers. As such they have some security in the knowledge that they could leave their present employment and probably find a comparable position because they have the education and experience generally desired by industrial firms. In this sense the results on the SIV regarding independence can be understood.

The true entrepreneurs and other owners scored significantly higher than the business hierarchs on the leadership value. This describes the importance of power and authority. The true entrepreneurs and other owners also scored significantly higher on the authoritarian personality scale. On the SIV scale, the scores for leadership were lower than the scores of comparable groups while on the F Scale, the scores were similar to the scores of a managerial sample.

It was also noted that factors of social origin and educational level have been found to correlate with F Scale scores. These correlations seem to agree with the present findings.

In conclusion, the business hierarchs appeared to be more independent than the business owners while both business owner groups tended to be more authoritarian than the business hierarchs.

### **PART III**

#### **THE RESEARCH CONCLUSIONS**



## CHAPTER VIII

### SUMMARY AND CONCLUSIONS

The purposes of this study were twofold: (1) to extend the entrepreneurial studies of Orvis F. Collins and David G. Moore through the verification of some of their results in another context, using different research techniques; and (2) to directly compare the "true entrepreneur," the "other owner," and the "business hierarch" in the industrial sector of our economy. The "true entrepreneur" was defined as an individual who creates a business where none previously existed. The individual who purchases or inherits an existing business was called an "other owner." The "business hierarch" was defined as an individual who seeks occupational success by climbing the hierarchical ladder of an existing organization.

It was hypothesized that the place of birth, social origins, educational level attained, military mobility, orientations toward work, job mobility, and level of authoritarianism were significant differentiating factors among the three groups. The findings described in Part II generally supported these hypotheses.

The sample was drawn from the Rochester, New York, Standard Metropolitan Statistical Area. A mailing list of 814 potential respondents was developed from the Industrial Directory of the Rochester Chamber of Commerce and from the membership list of the Rochester Engineering

Society. The questionnaires were mailed out during March and April 1965. The cutoff date for including questionnaires in the study was August 31, 1965.

A total of 303 useable questionnaires was received. The net response was 33 percent from the chamber listing and 53 percent from the engineering society membership. The respondents included 113 true entrepreneurs, 80 other owners, and 110 business hierarchs.

This chapter will summarize the findings, explain some of the limitations of the study, present the conclusions, and discuss some recommendations for further research.

### Summary of Findings

The composition of the three groups was examined to determine similarities and differences in structure. The groups were found to be homogeneous with respect to sex, age, and marital status. The respondents were all male, they were an average of 50 to 52 years of age, and the great majority were married. The sample groups proved to be somewhat heterogeneous with regard to income from present employment. Approximately 30 percent of the individuals in each of the three groups reported yearly earnings in excess of \$25,000. The remainder of the business hierarchs were predominantly in the \$10,000 to \$25,000 earning categories. About 15 percent of both the true entrepreneurs and the other owners reported earnings of less than \$10,000. Analyzing the job titles of the respondents, it was found that almost all of the true entrepreneurs and other owners had titles of president, owner, or partner. Thirty-five percent of the business hierarchs were in the top

echelons of their companies (vice-presidents or higher) while the remainder seemed to be primarily in middle-management levels.

The true entrepreneurs and other owners were then compared to see if their business operations were generally similar. By definition, all of the other owners owned businesses which had been started by others. Fifty-five percent of the other owners entered business through inheritance or by purchasing the business from relatives. The remainder purchased their businesses from non-relatives. The true entrepreneurs and the other owners were found to be similar with regard to the number of businesses owned (about one fourth owned more than one business), the incidence of partners (about one half had partners in their present business), the size of the firm owned, the type of industrial activity engaged in, the legal form of business, and the annual gross sales. A very significant difference was found in the ages of the firms. This was to be expected because of the prior existence of the firms owned by the other owners.

The first hypothesis which was investigated was that "true entrepreneurs have a greater tendency than the other groups to be either foreign-born or to have been born geographically near their present residence." Over 12 percent of the true entrepreneurs were foreign-born. This represented three times the incidence of foreign birth among the other owners and business hierarchs. Approximately one third of the respondents in all three groups who had been born in the United States reported that one or both of their parents had been foreign-born. Thirty-seven percent of the true entrepreneurs and 33 percent of the business hierarchs had been born in Rochester or Monroe County compared with 66 percent of the other owners. Over 86 percent of the other owners had

been born in New York State. This compared with 67 percent of the true entrepreneurs and 57 percent of the business hierarchs. The other owners clearly showed a greater tendency to be home-grown. Business ownership by relatives was probably the major reason for this strong difference. The business hierarchs seemed to have the smallest home-grown influence. Thus, the true entrepreneurs exhibited a greater tendency for foreign birth while the other owners had a greater incidence of being home-grown.

The second hypothesis stated that "true entrepreneurs tend to come from a lower socioeconomic background as measured by fathers' education and fathers' occupation." It was found that the fathers of the business hierarchs were far better educated than the fathers of the true entrepreneurs and other owners. Almost 58 percent of the true entrepreneurs' fathers had not attended high school compared with 28 percent of the business hierarchs' fathers. More of the fathers of the business hierarchs attended high school, graduated from high school, and graduated from college than fathers in either of the other two groups. The differences in fathers' occupations were also pronounced. One third of the true entrepreneurs came from a blue-collar background as compared with 24 percent of the other owners and 18 percent of the business hierarchs. More business hierarchs than business owners came from families where the father was a minor executive, a major executive, or a professional man. Over 45 percent of the fathers of other owners owned small businesses. This would be expected from the high incidence of inheritance and purchase of businesses from relatives among the other owners. More than 30 percent of the fathers of the true entrepreneurs and almost 25 percent of the business hierarchs' fathers were also small businessmen.

In conclusion, the fathers of the business hierarchs appeared to have been better educated and to have held higher level occupations than the fathers of the true entrepreneurs and the other owners. The true entrepreneurs' fathers seemed to have been the least educated and to have held the lowest level of occupations of the three groups.

The next hypothesis said that "true entrepreneurs tend to have had an unhappy childhood which was manifested in terms of economic hardships, broken homes, and strained parental relations." The true entrepreneurs tended to come from significantly larger families than the other respondent groups. The respondents' recollections of their childhoods, however, revealed no differences in the perceived economic level of the family of orientation, the evaluations of parental control, or their evaluation of childhood happiness. The true entrepreneurs tended to describe the section of town lived in as a child in somewhat lower terms than did the other owners or business hierarchs. In general, the research did not substantiate this hypothesis.

"True entrepreneurs have a tendency to be less well-educated than the other respondents and to view formal education in rather pragmatic terms." The educational differences among the respondents proved to be highly significant. Over 95 percent of the business hierarchs attended college and 77 percent graduated. In the other owner group, 59 percent attended college and 38 percent graduated, while in the true entrepreneur group, 54 percent attended and 28 percent graduated.

Analyzing the major field of study for those who graduated from college, over 83 percent of the business hierarchs majored in engineering. This reflected the major source of the business hierarch sample. One half of the true entrepreneurs graduating from college majored in

engineering compared with only 13 percent of the other owners. Only 22 percent of the true entrepreneurs majored in business administration or economics compared with 40 percent of the other owners. It is evident that the true entrepreneurs tended to choose technical training while the other owners seemed to prefer business training. The true entrepreneurs may have been spurred on by a necessity to provide a solid preparation for a general occupational career while many of the other owners could prepare for a specific role in a specific organization through inheritance or purchase from relatives.

With regard to their attitudes toward formal education, a significant difference of opinion was found concerning the source of most knowledge. Two thirds of both the true entrepreneurs and other owners felt that personal experience had been the best source of knowledge. In addition, 20 to 25 percent felt that school had been the best source. The business hierarchs disagreed. Over half cited school as the best source and 38 percent felt that it had been personal experience. These results probably reflect the different educational levels attained by the respondents.

There was also significant disagreement regarding the most important role of formal education. To 36 percent of the true entrepreneurs, training for a profession was the most important, followed by learning the basic tools for communicating with others for 29 percent. Over 40 percent of the business hierarchs agreed that training for a profession was most important, but for 20 percent, developing personal maturity was most important. For the other owners, training for a profession, developing personal maturity, and learning the basic tools

for communicating with others were each cited by approximately one fourth of the respondents.

The recollections of the incidence of conflict with teachers and the general admiration of teachers provided no significant differences.

In conclusion, the true entrepreneurs did tend to have the least education of the three groups tested. The attitudes of the true entrepreneurs toward education tended to be somewhat more pragmatic than the attitudes of the other groups. There was a greater emphasis on learning through experience, training for a profession, and learning how to communicate with others.

The fifth hypothesis stated that "those entrepreneurs having had military experience will tend to have demonstrated less service mobility than the other groups." Less than half of the respondents had served in the armed forces. The three groups proved very similar with respect to branch of service, length of service, and discharge date. The business hierarchs tended to enter the service at higher ranks than the true entrepreneurs or other owners. This probably was attributable to the higher frequency of college graduation and attendance in R.O.T.C. programs among the business hierarchs. At discharge, there were no significant differences in exit ranks. A measure of in-service mobility also revealed no differences. The results seemed to show that the three groups had similar service experiences.

"True entrepreneurs tend to have experienced greater inter-firm movement during their occupational careers than the other respondents" was the next hypothesis tested. It was found that 43 percent of the business hierarchs, 24 percent of the other owners, and 11 percent of the true entrepreneurs worked for only one firm during their occupa-

tional careers. One third of the true entrepreneurs worked for five or more firms compared with 14 percent of the other owners and 11 percent of the business hierarchs. Clearly, the true entrepreneurs tend to experience much more job movement.

The seventh hypothesis was that "true entrepreneurs have a tendency to work more sporadically and find work more fatiguing and less enjoyable than the other groups." Similar responses were found regarding the tiring effect of work and the preferred work habits of the three groups. Some differences were evident with respect to the most important feature of a job.

The enjoyment of the work itself was regarded as most important by 59 percent of the business hierarchs, 52 percent of the true entrepreneurs, and 41 percent of the other owners. The other owners tended to place more importance than the other two groups on the kind of work actually done and the money earned and the security offered by the job. In general, however, the hypothesis was not proved.

The final hypothesis stated that "true entrepreneurs tend to be more authoritarian than the other respondents." Three psychological tests were administered to the respondents in the research questionnaire. The Survey of Interpersonal Values measured the value strengths of support, conformity, recognition, independence, benevolence, and leadership. The results did not show strong differences among the three groups. The other owners did value support (that is, being treated with kindness, understanding, and consideration) more than the true entrepreneurs and the business hierarchs. The business hierarchs tended to value independence more than the other groups. Both the true entrepreneurs and the other owners exhibited a tendency to value leadership more than the business hierarchs.



The Dogmatism Scale, which purports to measure general authoritarianism, revealed no significant differences among the three groups. The modified F scale which measures right-of-center or fascistic authoritarianism did find significant differences among the respondents. The true entrepreneurs were the most authoritarian of the three groups. Both the true entrepreneurs and the other owners were significantly more authoritarian than the business hierarchs. In conclusion, the true entrepreneurs and other owners tended to be more authoritarian and more leadership-oriented than the business hierarchs.

#### Limitations of the Study

The findings cited above apply specifically to the circumstances and the conditions under which the study was performed. As such, the results must be viewed as indications of what might exist in another locality or in the nation as a whole.

In contacting the business owner sample, it was found that a sizeable proportion of the potential respondents on the chamber listing were no longer in business. Statistics indicate that the total number of businesses in the area studied have remained relatively stable over the years.<sup>1</sup> Therefore, the tendency seems to be for the number of firms in the Rochester SMSA as well as the United States as a whole to remain fairly constant in spite of a high degree of turnover.<sup>2</sup> The smallest firms are more apt to become turnover statistics. The net result of

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<sup>1</sup>See Chapter III, p. 38.

<sup>2</sup>For a review of national turnover statistics for business firms, see Kurt B. Mayer and Sidney Goldstein, The First Two Years: Problems of Small Firm Growth and Survival, Small Business Research Series, No. 2 (Washington: U.S. Government Printing Office, 1961), pp. 3-6.

these occurrences would be that the respondents to the questionnaire would tend to have been in business a little longer than the average firm in the community and that they would also tend to be slightly larger in size than the community cross section might indicate. During the telephone follow-up of the chamber sample, the impression was received that the smallest firms were least likely to respond. With little or no division of labor, the owner had little time to fill out questionnaires. Both of these effects probably explain why there were fewer respondents in the smallest size of firm category than was reflected in the chamber listing.

It is possible that some of the non-respondents did not respond because they did not have sufficient education to understand the questionnaire (25 percent of the true entrepreneurs had not graduated from high school). During the telephone follow-up, several admitted that they had tried to fill out the questionnaire but could not. The psychological tests were especially difficult for many of these individuals.

The business hierarchs were mainly engineers. Many of these engineers held managerial positions but the fact that their training was mainly in engineering did not make them a truly representative business hierarch group.

The chi square computation has been used as the test of significance for the data analyzed. The significance of a table depends on the entire table. Thus, when three groups were compared, the differences among the three groups were either significant or not significant. The location of the differences can only be visually ascertained.

Two types of errors can be introduced in determining significances of data. Differences may be found significant when they really are not;

differences may be deemed not significant when they really are. These two errors work in opposite directions. For example, when differences are found to be significant at the .05 level, it means that the data could be duplicated by chance only one time in twenty. Thus, if twenty differences are found to be significant at the .05 level, chances are that at least one of these significances really is not significant. If the level of significance used is .01, there is less chance of committing such an error. But the chances are increased of rejecting differences as being not significant when they really are significant.

### Conclusions

This study has attempted to take some of the findings from the entrepreneurial studies of Collins and Moore and verify them through a mailed questionnaire administered in the Rochester SMSA. In addition, to the true entrepreneur, the research identified the other owner and the business hierarch and directly compared these three groups.

The attempt to gather attitudinal data through a mailed questionnaire proved to be only mildly successful. Of eleven questions in the attitudinal category, only four revealed significant differences. For the remainder, either no differences existed or the method employed was not adequate.

From the results obtained, it is evident that the typical entrepreneur lacks the social background, the economic background, and the education necessary to be a successful executive working for someone else. In many respects, the entrepreneur closely resembles the blue-collar laborer. As far as being able to climb the hierarchy of an

existing corporation, he does not stand a chance. He is, as Collins and Moore conclude, marginal to established organizations.

The business hierarch, on the other hand, tends to come from a higher social background, a better economic background, and is college trained. These factors, and particularly the college education, represent the means to a potentially successful hierarchical climb.

The other owner cannot be classified as being similar to either the true entrepreneur or the business hierarch. His qualifications and credentials generally fall somewhere between the other two groups.

The factor of most importance seems to be education. The man from a poor economic background still has a chance to become occupationally successful as a business executive if he has a college education. The entrepreneur, then, is one of those who does not typically possess the education but does have the vision and the fortitude to try his chances as his own boss. This represents one area where business experience and acumen can outweigh a college education.

#### Implications and Recommendations for Further Study

Every large corporation can be traced back to an entrepreneur who perceived of a new or better product or service which could be made or performed. The corporation may be an economic power today because of, in spite of, or without the aid of the original creator. Whatever the case, the entrepreneurial role must be performed. As the underdeveloped nations of the free world seek to industrialize and expand their economies, the entrepreneur is an important factor. The entrepreneur continues to be an important potential force in the economy of the United States.

Entrepreneurship is not all glitter and glamor. In developing a new business, the typical entrepreneur can expect little if any help from the community. Nobody regards him as a potential economic force. If anything, he is treated negatively. Collins and Moore aptly describe these early phases of entrepreneurship:

Certainly the American symbolic dream of entrepreneurial success plays an important part in motivating many who start their own business. It is also true that those who succeed have a unique and fundamental ability and drive. Nonetheless, the attractiveness of the entrepreneurial way of business life is questionable. Setting up a new business is no easy task. A competitive economy seldom welcomes newcomers. More than this, the established community tends to reject grimy recent arrivals. Actually, only 4 percent of our respondents indicated that they received any help whatsoever from the community in getting their business going. The vast majority were totally on their own. None of the presumed supportive agencies in our society reached out to lend a helping hand, at least in the beginning phases of the business. To be sure, a number of such agencies came in once the business was going; but in the initial periods, the grubby back-alley shop with its equally grubby owner hardly seemed to be worth the attention of the established community. As a consequence, many of our respondents . . . went through initial periods of stark depression when they held their businesses together by pouring their own sweat into them.

The image of the entrepreneur as the great inventor, the great promoter, or the great and daring risk-taker simply doesn't square with the facts. The reality is far less spectacular than this. In fact, in the beginning entrepreneurship turns out to be a mundane affair and not at all heroic. There is the entrepreneur without capital resources, without apparent social skills, and without even a good idea. No respectable element in the community is even aware of him, let alone ready to help him. He may go to the local Chamber of Commerce and ask for information about a building he might rent.

"What kind of business are you trying to develop?" asks the Chamber of Commerce agent.

"Heat treating," answers our entrepreneur still looking grubby in spite of his best Sunday suit.

"We don't need any more heat treating plants in this town," advises the Chamber of Commerce man. And the interesting thing is that he is right. He really does know the community and its business life. He is keenly aware of its economic needs. What it truly needs is a branch of General Motors, or a chunk of the new space industry, or barring these, a government facility--anything that will create jobs.

But a dirty, cluttered little affair like a heat treating plant will add nothing and ruin the appearance of the town.

Having left the Chamber of Commerce somewhat dismayed but not undaunted, our hero now goes to the local bank. "I need capital," he announces to the banker rather grimly.

"What have you got for collateral?" asks the banker.

"These," says the entrepreneur, holding out his hands.

"Sorry," says the banker, concluding the interview.

Yet, those hands are for most entrepreneurs their greatest asset. These keep them going in the first trying years. Without them and the skill that is built into them, most manufacturing entrepreneurs would never survive the first few years.<sup>3</sup>

The present study found significant differences between the entrepreneur and the business hierarch with respect to social background, economic background, education, and occupational experience. The entrepreneur is not unlike the blue-collar worker. The lack of education is probably the most important factor. The entrepreneur has a rather limited choice. He can work for someone else in a blue-collar position or a low-level white-collar job. If he has more ambition, the only other choice is entrepreneurship. These alternatives are graphically illustrated by the following anecdote from Collins and Moore:

One entrepreneur was asked to explain why he believed he was successful in his own business. He gave his answer by telling a story that his grandfather had once repeated to him. It seems that a little boy came running to his father, crying, "Dad, Dad! I just saw a dog chasing a rabbit and the rabbit got away by climbing a tree."

"Son," said the father, "you know a rabbit can't climb a tree."

"Well, he can," said the little boy, "if he has no other place to go."<sup>4</sup>

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<sup>3</sup>Orvis F. Collins and David G. Moore, The Enterprising Man (East Lansing, Mich.: Bureau of Business and Economic Research, Michigan State University, 1964), pp. 241-243.

<sup>4</sup>Ibid., p. 243.

Success as an entrepreneur evidently does not require a college degree. Mayer and Goldstein, in their study of retail entrepreneurs concluded:

Although valuable in itself, formal education seldom provides any direct training for a business career. . . . Occupational experience, on the other hand, is generally believed to have an important influence on the conduct of a business enterprise. Sound judgment on capital requirements, sales policies, and other practices are presumably enhanced by first-hand knowledge in the same line or by prior managerial experience.<sup>5</sup>

In a recent analysis of millionaire entrepreneurs, Time found many common traits among those studied. Almost all of them had decided early in life to be their own bosses and most of them started earning money while still children. "Many of them . . . never went to college; others . . . impatiently dropped out of college in order to study in the marketplace."<sup>46</sup> In fact, one of the millionaires was quoted as saying: "College prepares you to work for someone else--and you can only make a million by working for yourself."<sup>7</sup> William H. Whyte, Jr., has noted a strong tendency for college seniors to seek out the large corporations and avoid small business or entrepreneurship.<sup>8</sup>

All this raises some interesting questions for further research. Does formal education, and particularly college education, stifle entrepreneurial motivation or do college graduates realize that their additional education will not be very useful in entrepreneurship? If entrepreneurs and blue-collar workers have similar backgrounds, what factor or

<sup>5</sup>Mayer and Goldstein, op. cit., p. 104.

<sup>6</sup>"Millionaires," Time, December 3, 1965, p. 91.

<sup>7</sup>Ibid., p. 92.

<sup>8</sup>William H. Whyte, Jr., The Organization Man (Garden City, N.Y.: Doubleday & Co., Inc., 1956), p. 76.

factors cause the entrepreneurs to leave the relative security of working for someone else and create their own businesses?

There has been no behavioral research done to date comparing the successful entrepreneur to the unsuccessful one. Or the successful entrepreneur to the more successful entrepreneur. The criteria of "success" have not been determined. The tendency has been to equate "successful" with "still in business."

A newer type of entrepreneur has also been neglected. He is the individual who performs an entrepreneurial role within an existing organization. This individual may be charged with the responsibility of redirecting the product or service line of an organization. The corporation may either be diversifying or changing its entire product emphasis. Such a person must act as an "entrepreneur" within a corporate framework.

Interest in the entrepreneur and his problems are beginning to gain momentum. Organizations have been developed in several communities for the specific purpose of loaning money and offering advice to existing small businesses and to individuals with nothing more than an idea. The Small Business Administration is attempting to expand their program of lending money. The Administration is also developing a corps of retired executives to offer suggestions and advice to small businessmen. It is hoped that the results of this study will lead to further interest and understanding of the entrepreneur.



## **APPENDIX**

Appendix Table 1.--Chi square computations

Table	Maximum Value for no Statistically Significant Difference for the Appropriate Degrees of Freedom		Computed Chi Square Value	
	.01 Level	.05 Level		
3.2	Ages at time of study	34.81	28.87	26.34
3.3	Marital status	16.81	12.59	8.25
3.4	Income	32.00	26.30	29.00
3.5	Number of businesses owned	11.35	7.82	2.23
3.6	Incidence of partners	11.35	7.82	2.17
3.7	Ages of firms	15.09	9.24	65.15
3.8	Size of firms	15.09	9.24	6.23
3.9	Classifications of firms	36.19	30.14	13.27
3.10	Annual gross sales	16.81	12.59	10.46
4.1	Nativity	9.21	5.99	4.53
4.4	Place of birth	16.81	12.59	38.30
4.5	Size of childhood location	20.09	15.51	29.15
4.6	Education of fathers	20.09	15.51	24.48
4.7	Occupation of fathers	32.00	26.30	27.14
4.8	Children in family	9.21	5.99	7.26
4.9	Position in family	16.81	12.59	9.70
4.10	Family economic condition	13.28	9.49	7.03
4.11	Section of town	16.81	12.59	13.04
4.12	Status of parents	13.28	9.49	4.30
4.13	Control of behavior	20.09	15.51	7.42
4.14	Childhood happiness	16.81	12.59	2.37
5.1	Educational achievement	26.22	21.03	81.98
5.3	Major field--college attendees	23.21	18.31	51.52
5.4	Major field--college graduates	23.21	18.31	52.40
5.6	Source of most knowledge	16.81	12.59	26.94
5.7	Most important role of education	23.21	18.31	26.66
5.8	Conflict with teachers	9.21	5.99	2.40
5.9	Admiration of teachers	13.28	9.49	9.24
6.1	Branch of service	16.81	12.59	7.72
6.2	Entrance rank	13.28	9.49	10.45
6.3	Discharge rank	13.28	9.49	6.58
6.5	Military mobility	13.28	9.49	1.39
6.6	Inter-firm movement	23.21	18.31	50.22
6.7	Tiring effect of work	9.21	5.99	5.14
6.8	Preferred work habits	13.28	9.49	1.65
6.9	Most important job feature	13.28	9.49	9.73



DAVID G. MOORE  
DEAN

NEW YORK STATE  
SCHOOL OF INDUSTRIAL AND LABOR RELATIONS  
A CONTRACT COLLEGE OF THE STATE UNIVERSITY  
CORNELL UNIVERSITY  
ITHACA, NEW YORK

March 15, 1965

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.....  
.....

Dear .....

I'm writing to you personally because I am most anxious to have your participation in a study being conducted by Cornell on the background and opinions of executives. The study is being directed by Neil G. Soslow who is on our staff and with whom I have worked for several years. The results of the study will be used not only for basic research but also to help us do a better job of management development and executive training.

I have for a long time been interested in business entrepreneurs and executives. For a number of years, I worked at Sears, Roebuck and Co. in the national personnel office where I was concerned in part with executive selection and development. Later I was director of the Executive Program at the University of Chicago and had the opportunity of observing executives in business in a variety of settings. At that time, I became interested in contrasting men who start businesses with those who are executives in established organizations. This interest resulted in the recent publication of a book entitled The Enterprising Man: A Study of Men Who Start Businesses.

Your participation in this study will add much to our understanding of one of the most important manpower resources in the country, namely business management. Businessmen,

-2-

such as yourself, have been selected to be representative of firms of all sizes in Monroe County. The sample was chosen from the Industrial Directory of the Rochester Chamber of Commerce.

The enclosed questionnaire has two major parts, including questions on personal background and an opinion inventory. ALL ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE. It will take approximately one hour for you to fill out the questionnaire. I realize that this is a lot of time to ask of a businessman, but the potential results of this research to students and practitioners are great. The success of the study depends on everyone returning the questionnaire. For your convenience, a postage-paid return envelope has been provided.

If you have any questions concerning the study or questionnaire, please direct inquiries to Neil G. Soslow, Director of Executive Study, School of Industrial and Labor Relations, Cornell University, Ithaca, New York. If you send him your name and address, he will be glad on the completion of the study to send you either a summary of the study or indicate where the results are published.

Sincerely yours,

Enclosures

## BUSINESS EXECUTIVE STUDY

*Strictly Confidential*

Cornell University

## PART 1 - Personal Background Information

Section A deals with questions of a straight factual nature. Section B deals with your reactions to your background and work. Please answer all of the questions carefully and honestly by putting a check mark [x] in the appropriate box.

- A. 1. Are you  
     Male ..... ☐ 1  
     Female ..... ☐ 2
2. What is your present age? ..... \_\_\_\_\_
3. What is your present marital status?  
     Single ..... ☐ 1  
     Married, no children ..... ☐ 2  
     Married, one or more children ..... ☐ 3  
     Widowed ..... ☐ 4  
     Separated or divorced ..... ☐ 5
4. Place of Birth:
- |               | Self                       |       | Wife or<br>Husband         |       | Father                     |       | Mother                     |
|---------------|----------------------------|-------|----------------------------|-------|----------------------------|-------|----------------------------|
| U.S. ....     | <input type="checkbox"/> 1 | ..... | <input type="checkbox"/> 1 | ..... | <input type="checkbox"/> 1 | ..... | <input type="checkbox"/> 1 |
| Non-U.S. .... | <input type="checkbox"/> 2 | ..... | <input type="checkbox"/> 2 | ..... | <input type="checkbox"/> 2 | ..... | <input type="checkbox"/> 2 |
5. Were you born in New York State?  
     Yes ..... ☐ 1  
     No ..... ☐ 2
6. Were you born in Rochester or Monroe County (New York)?  
     Yes ..... ☐ 1  
     No ..... ☐ 2
7. Was most of your childhood spent in the place of  
     your birth?  
     Yes ..... ☐ 1  
     No ..... ☐ 2

8. What was the approximate population (at the time of your childhood) of the place where most of your childhood was spent?

Over 400,000 (or a suburb of a city this size) ..... ☐ 1  
 100,000 - 400,000 (or a suburb of a city this size)... ☐ 2  
 25,000 - 100,000 ..... ☐ 3  
 2,500 - 25,000 ..... ☐ 4  
 Rural or less than 2,500 ..... ☐ 5

9. What is your approximate yearly income from your present employment only?

Less than \$5,000 ..... ☐ 1  
 \$5,000 - \$5,999 ..... ☐ 2  
 \$6,000 - \$6,999 ..... ☐ 3  
 \$7,000 - \$9,999 ..... ☐ 4  
 \$10,000 - \$14,999 ..... ☐ 5  
 \$15,000 - \$19,999 ..... ☐ 6  
 \$20,000 - \$24,999 ..... ☐ 7  
 \$25,000 - \$49,999 ..... ☐ 8  
 More than \$50,000 ..... ☐ 9

10. Do you receive any income other than from your present employment?

Yes ..... ☐ 1  
 No ..... ☐ 2

If yes, approximately what percent of your income comes from other than your present employment? ..... %

11. Extent of Schooling of yourself and your father and mother. (Please check only the highest correct category.)

	Self	Father	Mother
Less than high school ....	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Some high school .....	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
High school graduate .....	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Some college .....	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4
College graduate .....	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
Post graduate study .....	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6
Master's degree .....	<input type="checkbox"/> 7	<input type="checkbox"/> 7	<input type="checkbox"/> 7
Post master's study .....	<input type="checkbox"/> 8	<input type="checkbox"/> 8	<input type="checkbox"/> 8
Doctoral degree .....	<input type="checkbox"/> 9	<input type="checkbox"/> 9	<input type="checkbox"/> 9

12. If you attended college, please fill in the following:

<u>Institutions</u> <u>Attended</u>	<u>Major</u> <u>Subject</u>	<u>Years</u> <u>Attended</u>	<u>Degree</u>	<u>Year</u> <u>Received</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

13. Were you in the armed services?

Yes ..... ☐ 1  
 No ..... ☐ 2

If yes,

- a. What branch of the service? \_\_\_\_\_
- b. Your rank on entering \_\_\_\_\_
- c. Your rank at discharge \_\_\_\_\_
- d. Year of discharge \_\_\_\_\_
- e. Number of years in the service \_\_\_\_\_

14. How many business firms have you been employed in during your business career, including your present firm? \_\_\_\_\_

15. Please complete the following by starting with your present employment and working backward. (You need account only for your present company and the three previous companies you have worked for.)

- A. 1. Dates of employment: From \_\_\_\_\_ to present
- 2. Location of firm (city and state): \_\_\_\_\_  
 \_\_\_\_\_
- 3. Approximate number of employees \_\_\_\_\_
- 4. Your job title \_\_\_\_\_
- 5. Approximately what percentage of your total time on your present job is spent in each of the following areas:
  - a. Administration and policy setting ..... %
  - b. Production ..... %
  - c. Sales ..... %
  - d. Financial ..... %
  - e. Purchasing ..... %
  - f. Personnel ..... %

- B. 1. Dates of employment: From \_\_\_\_\_ to \_\_\_\_\_
2. Location of firm (city and state): \_\_\_\_\_  
\_\_\_\_\_
3. Approximate number of employees \_\_\_\_\_
4. Your job title or a brief description of your work  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Reason(s) for leaving \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- C. 1. Dates of employment: From \_\_\_\_\_ to \_\_\_\_\_
2. Location of firm (city and state): \_\_\_\_\_  
\_\_\_\_\_
3. Approximate number of employees \_\_\_\_\_
4. Your job title or a brief description of your work  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Reason(s) for leaving \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



- D. 1. Dates of employment: From \_\_\_\_\_ to \_\_\_\_\_
2. Location of firm (city and state): \_\_\_\_\_  
 \_\_\_\_\_
3. Approximate number of employees \_\_\_\_\_
4. Your job title or a brief description of your work  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
5. Reason(s) for leaving \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

16. What is (was) your father's major occupation?
- |   |                          |   |
|---|--------------------------|---|
| Unskilled or semi-skilled laborer .....   | <input type="checkbox"/> | 1 |
| Skilled laborer .....                     | <input type="checkbox"/> | 2 |
| Farmer .....                              | <input type="checkbox"/> | 3 |
| Clerk or salesman .....                   | <input type="checkbox"/> | 4 |
| Minor executive (including foreman) ..... | <input type="checkbox"/> | 5 |
| Owner of small business .....             | <input type="checkbox"/> | 6 |
| Major executive .....                     | <input type="checkbox"/> | 7 |
| Owner of large business .....             | <input type="checkbox"/> | 8 |
| Professional man .....                    | <input type="checkbox"/> | 9 |
| Other (please specify) _____              | <input type="checkbox"/> | 0 |
17. Have you ever owned your own business?
- |           |                          |   |
|-----------|--------------------------|---|
| Yes ..... | <input type="checkbox"/> | 1 |
| No .....  | <input type="checkbox"/> | 2 |
- If yes,
- a. How many businesses have you owned? \_\_\_\_\_
- b. Have you ever had any partners in any of these businesses?
- |           |                          |   |
|-----------|--------------------------|---|
| Yes ..... | <input type="checkbox"/> | 1 |
| No .....  | <input type="checkbox"/> | 2 |

18. Do you now own your own business?

- Yes ..... ☐ 1  
 No ..... ☐ 2

If Yes, answer questions A-G below.

If No, skip to question 19.

a. How many years has it been in existence? \_\_\_\_\_

b. What kind of business is it? \_\_\_\_\_

c. Do you have any partners in your present business?

- Yes ..... ☐ 1  
 No ..... ☐ 2

If yes, are they close relatives?

- Yes ..... ☐ 1  
 No ..... ☐ 2

If no, did you ever have any partners in your present business?

- Yes ..... ☐ 1  
 No ..... ☐ 2

d. Did you

- Start the business from scratch ..... ☐ 1  
 Inherit the business from a relative ..... ☐ 2  
 Purchase the business intact from a relative .. ☐ 3  
 Purchase the business intact from a non-  
 relative ..... ☐ 4  
 Purchase the assets from a relative but  
 substantially changed the business before  
 reopening ..... ☐ 5  
 Purchase the assets from a non-relative but  
 substantially changed the business before  
 reopening ..... ☐ 6

e. What are your approximate gross sales per year?

- Under \$50,000 ..... ☐ 1  
 \$50,000-\$99,999 ..... ☐ 2  
 \$100,000-\$249,999 ..... ☐ 3  
 \$250,000-\$499,999 ..... ☐ 4  
 \$500,000-\$999,999 ..... ☐ 5  
 \$1,000,000-\$4,999,999 ..... ☐ 6  
 \$5,000,000-\$9,999,999 ..... ☐ 7  
 \$10,000,000 and over ..... ☐ 8

f. Is your business incorporated?

Yes ..... ☐ 1  
No ..... ☐ 2

If yes, approximately what percent of the stock  
is held by you or your immediate family? \_\_\_\_\_ %

h. Do you now own more than one business?

Yes ..... ☐ 1  
No ..... ☐ 2

If yes, how many businesses do you now own? \_\_\_\_\_

B. 19. How many children were there in your family (including  
yourself)? ..... \_\_\_\_\_

If more than 1, how many could be classified as being  
children during the time you were growing up? \_\_\_\_\_

20. Are you

An only child ..... ☐ 1  
The oldest in your family ..... ☐ 2  
The youngest in your family ..... ☐ 3  
Between the oldest and the youngest ..... ☐ 4

21. Which statement below most closely describes your childhood?

Poverty stricken most of the time ..... ☐ 1  
Poor but somehow managed to get along ..... ☐ 2  
Fluctuated between poor and comfortable ..... ☐ 3  
Lived comfortably most of the time ..... ☐ 4  
Lived very comfortably ..... ☐ 5  
Wealthy ..... ☐ 6

22. In what section of town did your family live longest while  
you were growing up?

Lived in one of the most exclusive sections ..... ☐ 1  
Lived in a good section, but not the best ..... ☐ 2  
Lived in an average section ..... ☐ 3  
Lived in one of the poorer sections ..... ☐ 4  
Lived in a rural area ..... ☐ 5

23. During most of your childhood, with whom did you live?

Both parents ..... ☐ 1  
One parent ..... ☐ 2  
A relative ..... ☐ 3  
Foster parents or non-relatives ..... ☐ 4  
In a home or institution ..... ☐ 5

24. Did your parents live together all of the time you were growing up?
- Yes ..... ☐ 1
- No, because one died ..... ☐ 2
- No, because they both died ..... ☐ 3
- No, because they were separated ..... ☐ 4
- No, because they were divorced ..... ☐ 5
25. Looking back on the days spent in your family or childhood home, how happy were they?
- Very happy ..... ☐ 1
- Quite happy most of the time ..... ☐ 2
- Neither very happy nor very unhappy ..... ☐ 3
- A little on the unhappy side ..... ☐ 4
- Very unhappy ..... ☐ 5
26. What kind of upbringing did you have?
- You were allowed to run wild ..... ☐ 1
- Plenty of freedom but parents were interested in what you were doing ..... ☐ 2
- Sometimes complete freedom, sometimes very restricting without apparent reason ..... ☐ 3
- They watched everything you did but were fair about it ..... ☐ 4
- You were hardly ever permitted to do anything ..... ☐ 5
27. Below is a list of things that a person may get out of going to school. Please rank the following items from 1 (most important) to 6 (least important.)
- Training for a profession ..... \_\_\_\_\_
- General cultural knowledge ..... \_\_\_\_\_
- Personal maturity ..... \_\_\_\_\_
- Social polish ..... \_\_\_\_\_
- Basic tools for communicating with other people ..... \_\_\_\_\_
- Awareness that it's a highly competitive world ..... \_\_\_\_\_
28. Which statement below most closely describes your feelings toward your formal education?
- Very helpful in life ..... ☐ 1
- Helpful on the most part ..... ☐ 2
- Interesting but not very practical ..... ☐ 3
- Not very interesting and not very practical ..... ☐ 4
- A place to mark time until something better comes along ..... ☐ 5

29. What were your general impressions of most of the teachers you had in school?
- You had the greatest admiration for all of them ..... ☐ 1
- You admired many of them ..... ☐ 2
- You admired some of them ..... ☐ 3
- You didn't admire any of them ..... ☐ 4
30. Did you experience direct and open conflict with your teachers?
- Never ..... ☐ 1
- Occasionally ..... ☐ 2
- Frequently ..... ☐ 3
31. Where do you feel that you gained the most knowledge?
- In school..... ☐ 1
- In your home ..... ☐ 2
- From personal experience ..... ☐ 3
- From examples set by others ..... ☐ 4
32. Which of the following best describes your work?
- Exhausting ..... ☐ 1
- Very tiring most of the time ..... ☐ 2
- Sometimes tiring ..... ☐ 3
- You know that you have done a day's work but you  
are not tired ..... ☐ 4
- Not the least bit tiring; you can work and still  
enjoy the evening without feeling it ..... ☐ 5
33. With respect to work habits, do you
- Work best on a regular schedule whether  
you are under pressure or not ..... ☐ 1
- Work best under pressure ..... ☐ 2
- Work best when you are in the mood  
whether you are under pressure or not ..... ☐ 3
34. Listed below are some features of a job that may be important to an individual on a job. Please rank these features from 1 (most important) to 6 (least important).
- The kind of work you actually do ..... \_\_\_\_\_
- The amount of money you make ..... \_\_\_\_\_
- What others think of people who do this job ..... \_\_\_\_\_
- The security the job can give you ..... \_\_\_\_\_
- The ways in which you can use the job to  
eventually get a better one ..... \_\_\_\_\_
- The enjoyment of the work itself ..... \_\_\_\_\_

## PART 2 - Executive Opinion Inventory

- A. The following statements represent things that people consider to be important to their way of life. The statements are grouped into sets of three. This is what you are asked to do:

Examine each set. Within each set, find the one statement of the three which represents what you consider to be most important to you. Blacken the space beside that statement in the column headed M (for most).

Next, examine the remaining two statements in the set. Decide which one of these statements represents what you consider to be least important to you. Blacken the space beside that statement in the column headed L (for least).

For every set you will mark one statement as representing what is most important to you, one statement as representing what is least important to you, and you will leave one statement unmarked.

*Example*

	M	L
To have a hot meal at noon .....	..... <input checked="" type="checkbox"/>	..... <input type="checkbox"/>
To get a good night's sleep .....	..... <input type="checkbox"/>	..... <input type="checkbox"/>
To get plenty of fresh air.. .....	..... <input checked="" type="checkbox"/>	..... <input type="checkbox"/>

Suppose that you have examined the three statements in the example, and although all three statements may represent things that are important to you, you feel that "To get plenty of fresh air" is the most important to you. You would blacken the space in the column headed M (for most) beside the statement. Notice that this has been done in the example.

You would then examine the remaining two statements to decide which of these represents something that is least important to you. Suppose that "To have a hot meal at noon" is the least important to you. You would blacken the space in the column headed L (for least) next to this statement. Notice that this has been done in the example.

You would leave the remaining statement unmarked.

In some cases it may be difficult to decide which statement to mark. Make the best decision that you can. This is not a test; there are no right or wrong answers. Be sure to mark only one M (most) choice and only one (least) choice in a set. Do not skip any sets. Answer every set.

## A

To be free to do as I choose .....	M	L
To have others agree with me .....	.....	.....
To make friends with the unfortunate .....	.....	.....
	M	L
To be in a position of not having to follow orders .....	.....	.....
To follow rules and regulations closely .....	.....	.....
To have people notice what I do .....	.....	.....
	M	L
To hold an important job or office .....	.....	.....
To treat everyone with extreme kindness .....	.....	.....
To do what is accepted and proper .....	.....	.....
	M	L
To have people think of me as being important .....	.....	.....
To have complete personal freedom .....	.....	.....
To know that people are on my side .....	.....	.....
	M	L
To follow social standards of conduct .....	.....	.....
To have people interested in my well being .....	.....	.....
To take the lead in making group decisions .....	.....	.....
	M	L
To be able to do pretty much as I please .....	.....	.....
To be in charge of some important project .....	.....	.....
To work for the good of other people .....	.....	.....
	M	L
To associate with people who are well known .....	.....	.....
To attend strictly to the business at hand .....	.....	.....
To have a great deal of influence .....	.....	.....
	M	L
To be known by name to a great many people .....	.....	.....
To do things for other people .....	.....	.....
To work on my own without direction .....	.....	.....
	M	L
To follow a strict code of conduct .....	.....	.....
To be in a position of authority .....	.....	.....
To have people around who will encourage me .....	.....	.....
	M	L
To be friends with the friendless .....	.....	.....
To have people do good turns for me .....	.....	.....
To be known by people who are important .....	.....	.....
	M	L
To be the one who is in charge .....	.....	.....
To conform strictly to the rules .....	.....	.....
To have others show me that they like me .....	.....	.....
	M	L
To be able to live my life exactly as I wish .....	.....	.....
To do my duty .....	.....	.....
To have others treat me with understanding .....	.....	.....
	M	L
To be the leader of the group I'm in .....	.....	.....
To have people admire what I do .....	.....	.....
To be independent in my work .....	.....	.....
	M	L
To have people act considerately toward me .....	.....	.....
To have other people work under my direction .....	.....	.....
To spend my time doing things for others .....	.....	.....
	M	L
To be able to lead my own life .....	.....	.....
To contribute a great deal to charity .....	.....	.....
To have people make favorable remarks about me .....	.....	.....

	M	L
To be a person of influence.....	.....	.....
To be treated with kindness.....	.....	.....
To always maintain the highest moral standards.....	.....	.....
	M	L
To be praised by other people.....	.....	.....
To be relatively unbound by social conventions.....	.....	.....
To work for the good of society.....	.....	.....
	M	L
To have the affection of other people.....	.....	.....
To do things in the approved manner.....	.....	.....
To go around doing favors for other people.....	.....	.....
	M	L
To be allowed to do whatever I want to do.....	.....	.....
To be regarded as the leader.....	.....	.....
To do what is socially correct.....	.....	.....
	M	L
To have others approve of what I do.....	.....	.....
To make decisions for the group.....	.....	.....
To share my belongings with other people.....	.....	.....
	M	L
To be free to come and go as I want to.....	.....	.....
To help the poor and needy.....	.....	.....
To show respect to my superiors.....	.....	.....
	M	L
To be given compliments by other people.....	.....	.....
To be in a very responsible position.....	.....	.....
To do what is considered conventional.....	.....	.....
	M	L
To be in charge of a group of people.....	.....	.....
To make all of my own decisions.....	.....	.....
To receive encouragement from others.....	.....	.....
	M	L
To be looked up to by other people.....	.....	.....
To be quick in accepting others as friends.....	.....	.....
To direct others in their work.....	.....	.....
	M	L
To be generous toward other people.....	.....	.....
To be my own boss.....	.....	.....
To have understanding friends.....	.....	.....
	M	L
To be selected for a leadership position.....	.....	.....
To be treated as a person of some importance.....	.....	.....
To have things pretty much my own way.....	.....	.....
	M	L
To have other people interested in me.....	.....	.....
To have proper and correct social manners.....	.....	.....
To be sympathetic with those who are in trouble.....	.....	.....
	M	L
To be very popular with other people.....	.....	.....
To be free from having to obey rules.....	.....	.....
To be in a position to tell others what to do.....	.....	.....
	M	L
To always do what is morally right.....	.....	.....
To go out of my way to help others.....	.....	.....
To have people willing to offer me a helping hand.....	.....	.....
	M	L
To have people admire me.....	.....	.....
To always do the approved thing.....	.....	.....
To be able to leave things lying around if I wish.....	.....	.....



- B. The following statements reflect what people think and feel about a number of important social and personal questions. The best answer to each statement is your personal opinion. We have tried to cover many different and opposing points of view. You may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others.

Please indicate the extent of your agreement or disagreement to these items according to the following scale:

SA - strongly agree  
 A - agree  
 M - mixed emotions (neither agree nor disagree)  
 D - disagree  
 SD - strongly disagree

Check the proper box below each question. Please work as rapidly as possible on these items.

1. In the history of mankind there have probably been just a handful of really great thinkers.

SA( )    A( )    M( )    D( )    SD( )

2. The United States and Russia have just about nothing in common.

SA( )    A( )    M( )    D( )    SD( )

3. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

SA( )    A( )    M( )    D( )    SD( )

4. There are a number of people I have come to hate because of the things they stand for.

SA( )    A( )    M( )    D( )    SD( )

5. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

SA( )    A( )    M( )    D( )    SD( )

6. I'd like it if I could find someone who would tell me how to solve my personal problems.

SA( )    A( )    M( )    D( )    SD( )

7. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

SA( )    A( )    M( )    D( )    SD( )

8. My blood boils whenever a person stubbornly refuses to admit he's wrong.

SA( )    A( )    M( )    D( )    SD( )

9. Of all the different philosophies which exist in this world there is probably only one which is correct.

SA( )    A( )    M( )    D( )    SD( )

10. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

SA( )    A( )    M( )    D( )    SD( )

11. The main thing in life is for a person to want to do something important.

SA( )    A( )    M( )    D( )    SD( )

12. Fundamentally, the world we live in is a pretty lonesome place.

SA( )    A( )    M( )    D( )    SD( )

13. A man who does not believe in some great cause has not really lived.

SA( )    A( )    M( )    D( )    SD( )

14. Man on his own is a helpless and miserable creature.

SA( )    A( )    M( )    D( )    SD( )

15. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.

SA( )    A( )    M( )    D( )    SD( )

16. A group which tolerates too much differences of opinion among its own members cannot exist for long.

SA( )    A( )    M( )    D( )    SD( )

17. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

SA( )    A( )    M( )    D( )    SD( )

18. Most people just don't know what's good for them.

SA( )    A( )    M( )    D( )    SD( )

19. Most people just don't give a 'damn' for others.

SA( )    A( )    M( )    D( )    SD( )

20. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

SA( )    A( )    M( )    D( )    SD( )

21. The present is all too often full of unhappiness. It is only the future that counts.

SA( )    A( )    M( )    D( )    SD( )

22. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.

SA( )    A( )    M( )    D( )    SD( )

23. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

SA( )    A( )    M( )    D( )    SD( )

24. There are two kinds of people in this world: those who are for the truth and those who are against the truth.

SA( )    A( )    M( )    D( )    SD( )

25. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.

SA( )    A( )    M( )    D( )    SD( )

26. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

SA( )    A( )    M( )    D( )    SD( )

27. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

SA( )    A( )    M( )    D( )    SD( )

28. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

SA( )    A( )    M( )    D( )    SD( )

29. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.

SA( ) A( ) M( ) D( ) SD( )

30. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

SA( ) A( ) M( ) D( ) SD( )

31. It is only natural for a person to be rather fearful of the future.

SA( ) A( ) M( ) D( ) SD( )

32. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

SA( ) A( ) M( ) D( ) SD( )

33. It is better to be a dead hero than to be a live coward.

SA( ) A( ) M( ) D( ) SD( )

34. If given the chance I would do something of great benefit to the world.

SA( ) A( ) M( ) D( ) SD( )

35. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

SA( ) A( ) M( ) D( ) SD( )

36. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

SA( ) A( ) M( ) D( ) SD( )

37. There is so much to be done and so little time to do it in.

SA( ) A( ) M( ) D( ) SD( )

38. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.

SA( ) A( ) M( ) D( ) SD( )

39. A person who thinks primarily of his own happiness is beneath contempt.

SA( )    A( )    M( )    D( )    SD( )

40. Once I get wound up in a heated discussion I just can't stop.

SA( )    A( )    M( )    D( )    SD( )

41. Obedience and respect for authority are the most important virtues children should learn.

SA( )    A( )    M( )    D( )    SD( )

42. Every person should have complete faith in some supernatural power whose decisions he obeys without question.

SA( )    A( )    M( )    D( )    SD( )

43. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

SA( )    A( )    M( )    D( )    SD( )

44. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

SA( )    A( )    M( )    D( )    SD( )

45. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

SA( )    A( )    M( )    D( )    SD( )

46. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

SA( )    A( )    M( )    D( )    SD( )

47. People can be divided into two distinct classes: the weak and the strong.

SA( )    A( )    M( )    D( )    SD( )

48. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

SA( )    A( )    M( )    D( )    SD( )

49. Some day it will probably be shown that astrology can explain a lot of things.

SA( )    A( )    M( )    D( )    SD( )

50. Nowadays more and more people are prying into matters that should remain personal and private.

SA( )    A( )    M( )    D( )    SD( )

51. Most of our social problems would be solved if we could somehow get rid of the immoral, crooked, and feeble minded people.

SA( )    A( )    M( )    D( )    SD( )

52. If people would talk less and work more, everybody would be better off.

SA( )    A( )    M( )    D( )    SD( )

53. No sane, normal, decent person could ever think of hurting a close friend or relative.

SA( )    A( )    M( )    D( )    SD( )

The following code will enable us to tell the size of your firm. This is necessary in order to ensure that the proportion of firms in each size category approximates the actual distribution in the County. This information will also be used in conjunction with the present size of your firm to determine growth rates in the time period since the Industrial Directory was published. No attempt will be made to match individual responses with specific companies. Anonymity is guaranteed. However, if you are at all concerned about anonymity and the confidential nature of the questionnaire, just tear off the code number. But be sure to return the questionnaire.

NEW YORK STATE SCHOOL OF INDUSTRIAL AND LABOR RELATIONS  
A CONTRACT COLLEGE OF THE STATE UNIVERSITY  
CORNELL UNIVERSITY  
ITHACA, N. Y. 14850

July 15, 1965

Dear Sir:

Several weeks ago you were asked to participate in a study of small businessmen. A preliminary analysis indicates some very exciting information. We are anxious to begin the formal analysis of the questionnaires. If you have not as yet had a chance to return your questionnaire, could we receive it soon? We would like to be able to start the coding and analysis by the beginning of August.

We realize the great demands made on your time but we hope that you will be able to be included in this very important study. If you have already returned your completed questionnaire, we thank you very much for your interest and cooperation.

Sincerely yours,

Neil G. Soslow  
Director of Executive Study

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