Critical Lifetime Experiences of Entrepreneurs:
A Preliminary Analysis

Prepared by
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LIFETIME EXPERIENCES OF ENTREPRENEURS:
EXECUTIVE SUMMARY

Introduction

This report concerns the fundamental question of why some people chose to become entrepreneurs. In recent years there has been an increased interest in the process of entrepreneurship and a realization that it's perpetuation is important for the economic development of the nation. Several divergent lines of inquiry have been started, all attempting to answer the question of why some individuals become venture initiators. While some researchers have looked at psychological characteristics and others at sociological environments, this paper concentrates on critical lifetime experiences of the entrepreneurs. It seeks to determine if the experiences that entrepreneurs have as children and young adults had any significant influence on their ultimate decision to own and operate their own enterprises.

These critical lifetime experiences may occur both within the formal educational structure and without. They may include courses of instruction, extracurricular activities as well as job experiences. This study proceeds under three assumptions:

(1) There are certain critical early lifetime experiences which have an impact on the decision to choose entrepreneurship as a career,

(2) The critical lifetime experiences of entrepreneurs are different from those of managers, and
(3) Critical lifetime experiences can be used to predict the choice of entrepreneurship as a career path and to identify those individuals who possess a high propensity for entrepreneurship.

If these hypotheses prove to be correct, then an educational program could be structured which would increase the supply of entrepreneurs in the American economy.

This study must be viewed only as a first attempt to develop suitable methodologies for verifying the hypotheses listed above. It was not the intention of this study to provide definite answers, but rather to detail the inadequacies of past studies and to develop a statistically sound methodology which could be applied and replicated by other researchers.

The successes of this research project are:

(1) The development of a survey format which can be administered to a large number of respondents at a small cost and which overcomes the problem of limited sample size which have characterized previous inquiries concerning the characteristics of entrepreneurs,

(2) The actual use of the survey instrument over a large number of entrepreneurs to establish a data base which can be used in extensions of the research reported here,

(3) The application of various statistical tests to the data with the resulting development of certain conclusions about the critical lifetime experiences of the entrepreneurs which point the direction future research should take.
Problems of Previous Studies

Previous studies of entrepreneurial characteristics and experiences have been of limited usefulness because of various shortcomings.

Lack of comparative studies: The first of these has been the failure to conduct a comparative analysis. Many of the past studies have drawn conclusions about entrepreneurship characteristics only on the basis of interviews or surveys conducted by entrepreneurs. By noting that there seemed to be similar characteristics or experiences of those interviewed or surveyed, the conclusions have been drawn that these characteristics and experiences typify all entrepreneurs and distinguish them from others. What has been lacking is a comparative analysis in which the characteristics and experiences of entrepreneurs are compared to those who are not venture initiators.

In order to compensate for this problem, this research project established four occupational classes to which the respondents were placed. The first of these were "managers" who managed a business which they did not initiate and who held no significant ownership position in that business. The second were "acquirers" who either purchased or inherited an existing business which they now manage but which they had not expanded since its acquisition. The third group were called "developers" who acquired an existing business, but did carry that business through a significant expansion. The last group were "initiators" who had started their own business and continued to own and operate it. While there is considerable controversy over the definition of an entrepreneur, it is apparent that those respondents in the first group are not entrepreneurs and those in
the last group probably are. As a general rule, this research project places "acquirers" in the non-entrepreneurial category since they did not significantly expand their business and "developers" in the entrepreneurial classification as they did. In this study comparisons are performed between these four occupational groups to determine the different lifetime experiences of those in each group and to see if the differences were significant in distinguishing the occupational groups from each other.

**Appropriate sample size:** Many of the past studies of entrepreneurial characteristics have been based on observations from only a small number of respondents. Often these respondents are located in only one geographical area and in one particular type of industry. There have been few attempts to establish a broad based study of nation-wide scope covering industries of different size and product. In this study, a nation-wide sample of 1,541 independent businessmen was used. The sample was drawn from the Action Council Members of the National Federation of Independent Businessmen (N.F.I.B.). These Action Council Members are selected by the N.F.I.B. staff on the basis of their success in business and community involvement. As can be seen from Table I, the sample selected corresponds very closely to the total membership of the N.F.I.B. as well as to the small business population of the United States. By use of such a broad based sample it was felt that the data obtained is more reliable as it represents a better cross-section of industry and geography in addition to including more observations. The larger base permitted the use of statistical tests of validity which can not be employed with
TABLE I

COMPARATIVE EMPLOYMENT OF N.F.I.B. ACTION COUNCIL MEMBERS (A.C.M.'s) TO THE U.S. SMALL BUSINESS POPULATION

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>00 Agriculture</td>
<td>3.8</td>
<td>4.1</td>
<td>1</td>
</tr>
<tr>
<td>10 General Construction</td>
<td>10.6</td>
<td>10.3</td>
<td>10</td>
</tr>
<tr>
<td>20 Manufacturing</td>
<td>14.2</td>
<td>11.0</td>
<td>8</td>
</tr>
<tr>
<td>30 Transportation</td>
<td>2.2</td>
<td>0.9</td>
<td>4</td>
</tr>
<tr>
<td>40 Wholesale Trades</td>
<td>10.0</td>
<td>6.8</td>
<td>9</td>
</tr>
<tr>
<td>50 Retail Trade</td>
<td>25.2</td>
<td>26.6</td>
<td>29</td>
</tr>
<tr>
<td>70 Finance, Real Estate</td>
<td>13.5</td>
<td>6.2</td>
<td>10</td>
</tr>
<tr>
<td>80 Non-Professional Services</td>
<td>9.6</td>
<td>12.4</td>
<td>)</td>
</tr>
<tr>
<td>90 Professional Services</td>
<td>9.4</td>
<td>4.9</td>
<td>) 28</td>
</tr>
<tr>
<td>99 Other</td>
<td>1.6</td>
<td>15.9</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Ibid.
samples of smaller size.

Development of a valid statistical methodology: Other studies of the characteristics and lifetime experiences of entrepreneurs generally have not involved tests of validity nor have they been of sufficient size that those tests were appropriate. In this research project various statistical techniques developed for use in the social sciences have been applied and the statistical conclusions reached can be documented as to their statistical veracity. In comparing the respondents who were not entrepreneurial with those who were, cross-tabulation analysis was employed. By this technique, differences in lifetime experiences and attitudes could be established. In addition, a discriminant analysis was performed using multi-variate analysis to determine if it was possible based on the lifetime experiences and characteristics of entrepreneurs and others to predict a tendency toward entrepreneurship or management.

Development of a survey: A fourth problem concerned the development of an appropriate survey. Past studies have often used personal interviewing which has been highly biased by the attitudes of the interviewer with resulting inconsistencies in conclusions. An elaborate process of pre-testing was used to develop the survey instrument employed in this project. Basically, both the form and the questions used in this survey were the result of preliminary surveying of smaller groups of entrepreneurs to obtain information from them about the lifetime experiences which they had. In the preliminary analysis it was determined that the most appropriate and efficient way to obtain the necessary information was through a structured survey instrument which elicits an answer about specific
points from the respondents. A copy of that final survey form has been included. The factors and critical lifetime experiences used are given in Table II.

Data was collected first on the demographics of the respondents, such as sex, age and education. Information was also acquired about what factors the respondents perceived as being necessary for the successful initiation of a business. These included aggressiveness, education in business, adequate capital, desire to make money, manager's expertise, experience and intelligence. All of these factors have been cited in previous studies as determinants of whether a person does or does not initiate a venture in later life. Educational experiences included the traditional courses offered in high school and college such as accounting, economics, finance, marketing, management and statistics as well as participation in certain outside activities including the National Honor Society, speech and drama organizations, holding class office, musical groups, and journalism. Also included were questions about technical/trade school and training as well as the participation of the respondent in conventions and seminars following their educational experiences.

Certain extracurricular activities were also included on the form because of their potential as distinguishing factors between entrepreneurs and others. These included athletics, scouting, Junior Achievement, 4-H, FFA/FHA and other social organizations.

It was felt that work experiences during the formulative years might also have an impact upon the later decision to become an entrepreneur. For that reason, respondents were asked to indicate if they had held jobs
TABLE II

FACTORS AND CRITICAL LIFETIME EXPERIENCES USED IN THE ANALYSIS OF ENTREPRENEURIAL TENDENCIES

PERCEIVED FACTORS FOR SUCCESSFUL BUSINESS INITIATION:

- Aggressiveness
- Education in Business
- Adequate Capital
- Desire to Make Money
- Manager's Experiences and Attitudes
- Intelligence

EDUCATIONAL EXPERIENCES:

- Accounting
- Economics
- Finance
- Marketing
- Management
- Statistics
- National Honor Society
- Technical-Trade School
- Speech - Drama
- Musical Organization
- Journalism
- Class Officer
- Conventions
- Seminars

EXTRA-CURRICULAR EXPERIENCES:

- Athletics
- Scouting
- Junior Achievement
- Four H
- FFA/FHA
- Social Organizations
- Farm Worker
- Paper Delivery
- Yard Work
- Retail Store Clerk
- Service Employee
- Errand Boy
- Construction Worker
as farm workers, paper deliverers, yard workers, retail store clerks, service employees or construction workers and to see if participation in these outside work activities had any influence on their entrepreneurial decision.

The survey also acquired information regarding the influence of other individuals on the respondents. Increasing attention is being focused in other studies of entrepreneurs on the role of parents and mentors in creating a proclivity toward venture initiation. For that reason, data was gathered on the parents of the respondents and their occupations. In addition, information was also collected upon the relationship and occupation of other individuals who had influenced the career choice of the respondent.

By having established a large data base of representative business persons and by employing statistically justifiable techniques to the responses received, it was hoped that some preliminary conclusions could be reached which either support previous research or deny it and which point the direction that future research would take.

Summary of Results

The conclusions reached from this study regarding the critical lifetime experiences of entrepreneurs must be viewed as tentative. These results point the direction for future research more often than they provide definitive answers to what lies behind venture initiation. The final report contains considerable data not summarized here. What follows are the more important conclusions:
(1) The first conclusion reached in the analysis was that the post-educational work activities were not a strong contributing factor in determining whether an individual did or did not pursue venture initiations. While there was a tendency for those who had worked in retail sales to become entrepreneurs more frequently than those who had other post-educational work experiences, this trend was not statistically significant.

(2) As a general rule, entrepreneurs tend to be less well educated than do managers and to attach less importance to education. This result was statistically significant even though the sample was biased by including in the "initiator" group individuals who had completed graduate training in the professions (law, medicine, dentistry, etc.). This conclusion is consistent with the hypothesis stated elsewhere in the literature that the educational system does not tend to prepare individuals for a career in their own business.

(3) Those who were placed in the entrepreneurial classification of "developer" or "initiator" were older and the age differential was statistically significant. This finding is consistent with the hypothesis that entrepreneurs acquire both experience and capital working elsewhere before they initiate their own ventures.

(4) There was a statistically significant relationship between the respondent's association with another individual who had initiated or started their own business and the respondent's decision to become an entrepreneur. The strength of the relationship increased when that other person was a parent. The idea that entrepreneurs beget
entrepreneurs is consistent with the analysis contained in this paper. For those who did not cite parental influence as a factor in their own entrepreneurial decision, the influence of another business person who owned their own business was a statistically significant determinant. This data also suggests that the role of mentors (parents or others) who are self-employed is a major factor in creating entrepreneurial proclivities. By way of contrast, when the influencer (parent or other) is a manager it is highly unlikely that the respondent chose to be either an "initiator" or a "developer."

(5) The longer an entrepreneur works the more important work experience becomes as the factor behind the decision to start a business of his/her own. All other factors, including the importance of parents and mentors, diminish the more work experience an entrepreneur has obtained. This finding is significant in that it substantiates the contention that entrepreneurs are likely to discover their innovative product, service or technology while an employee in another business. The more familiarity an individual acquires in a particular occupation, the more likely it is that he will find opportunities for venture initiation.

(6) While the statistical relationship was not strong, there was a higher percentage of females to be found in the "initiator" category than in the "manager" category. This may reflect bias against women in their upward mobility in managerial ranks causing them to see venture initiation as a more likely way to obtain both status and success.
(7) For educational experiences, education in business produced no discernable trend which distinguished entrepreneurs from others. The collegiate business courses in business, marketing, economics and finance all showed significantly less participation by the respondents in the "developer" and "initiator" classifications than by those in "manager". This finding tends to confirm the conclusion reached by others that collegiate business education is more likely to produce managers than it is entrepreneurs. At the elementary and high school levels, courses elected by the students had no statistical significance at all in distinguishing between entrepreneurs and others. There was a strong tendency for those in the more entrepreneurial classification to place little importance on business courses as factors in causing them to either start or develop their businesses.

(8) Participation in extracurricular activities seemed to be positively correlated with one becoming a manager rather than an entrepreneur. This was statistically significant for participation in athletics, music, speech, drama and scouting. Apparently entrepreneurs are less likely to engage in extracurricular activities of any variety than are those who chose management as a career.

(9) By way of contrast, participation in technical/trade school exhibited a strong correlation with beginning or expanding an existing business. Extracurricular activities of a technical nature such as construction work and farm labor also were positively associated with entrepreneurship. While not a technical activity, paper
delivery was a significant variable distinguishing between those who started and expanded businesses and those who did not.

As a general summary, this analysis has supported the contention that the two most important influences in distinguishing between those who become entrepreneurs and managers is the influence of other individuals, particularly parents, and length of work experience. As a general rule, educational experiences do not discriminate between entrepreneurs as others although the traditional collegiate business education tends to produce managers rather than "initiators" or "developers." Participation in extracurricular activities outside the classroom also tends to produce those who will not later initiate their own businesses. These conclusions are tempered by the fact that technical/trade activities were associated with individuals who later became venture initiators.

**Prediction of entrepreneurship:** The last analysis attempted in this study was to see if it was possible to predict entrepreneurship based on the lifetime experiences of the respondent. In order to make this determination, discriminant analysis using step-wide regression was employed. The first discriminant analysis accepted ten variables as important in separating "managers" from "initiators." These ten were sex, age, years in business, participation in seminars, attendance at conventions, scouting, FFA/FHA, courses in finance, courses in management, and paper delivery. Based on these ten variables, 65.7% of the respondents were correctly classified as either "initiators" or "managers."

An additional discriminant analysis which included only the critical
lifetime activities also successfully classified managers and initiators in over 63% of the cases. The significant variables used in the estimation were technical/trade courses, seminars, conventions, scouting, class office and courses in management. Results of this discriminant analysis indicate that it might be possible to predict entrepreneurial potential by looking at lifetime experience. Future research using this technique would be profitable.

Conclusion

The results of this research can form the basis for future development of educational programs to stimulate entrepreneurship in the future. This report has demonstrated that research on the characteristics of entrepreneurs should involve more than just a small number of subjects in a limited geographical area if one desires to produce statistically reliable results. In addition, it is important that studies of entrepreneurial characteristics involve comparative analysis between those who have initiated businesses and those who have not. Certainly the investigation of critical events in the lifetimes of those in business is a potentially profitable field for future research as these events, including extracurricular activities, have demonstrated some statistical significance in distinguishing between entrepreneurs and others.
SURVEY OF ENTREPRENEURS AND MANAGERS

Name ________________________________ Sex ______ Age ______ Years in business ______
Address ________________________________ City __________________________ State ______ Zip ______
Phone __________________________ Education Completed __________________________

Check the statement(s) which best describes you:

___ I manage a business owned by others.
___ I have begun a new business.
___ I have bought an existing business and developed it significantly.
___ I have bought an existing business and operated it essentially as it was.
___ Other: __________________________

If you have never developed a business of your own:
Do you have a strong desire to do so?  ___ Yes  ___ No
If you had the opportunity to start your own business right now, would you quit your current job and do it?  ___ Yes  ___ No

Consider the importance of the following factors for successfully starting a business:

A. Aggressiveness
B. Education in business
C. Adequate capital
D. Desire to make money
E. Manager's experiences and attitudes
F. Intelligence

In each of the following pairs of letters, circle the letter of the factor (as listed above) which you feel to be more important for success in starting a business.

A B C D E F G H I

In the following list of experiences, please check those in which you participated in the spaces provided on the left. Check the "Important" column if it was important to your beginning or developing a business (if applicable) or in managing one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td></td>
<td></td>
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<tr>
<td>Musical organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech-Drama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical-trade school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you have begun or significantly developed a business which you took over, please complete the following questions.

Did one of your parents significantly influence your decision to start a business?  Yes  No
If so, was this parent self-employed?  Yes  No
If not self-employed, what was his/her occupation?

Was there another individual who had a great influence on you?  Yes  No
What relationship did this person have to you?
Was this person self-employed?  Yes  No  His/her occupation?

Consider the importance of the following factors in influencing you to begin a business:
A. Another businessperson (encouragement, example)
B. Work experiences (what I learned from working for others)
C. Circumstances (death of breadwinner, dismissal from job, opportunity)
D. Personality (need to work for myself, inability to work with others)
E. Formal education (what I learned in school)
F. Family (example or encouragement of family members)

In each of the following pairs of letters, circle the letter of the factor (as listed above) which you feel to have been more important in influencing you to develop a business.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>A</th>
<th>C</th>
<th>D</th>
<th>B</th>
<th>C</th>
<th>F</th>
<th>E</th>
<th>D</th>
<th>A</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>F</td>
<td>F</td>
<td>D</td>
<td>A</td>
<td>F</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>D</td>
<td>A</td>
<td>B</td>
<td>E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Did you have prior work experience in a field related to that of your first business?  Yes  No
If so, do you feel this experience was important in your decision to begin your business?  Yes  No

Did you have work experience(s) in unrelated fields?  Yes  No
If so, do you feel this was important in your decision to develop your business?  Yes  No

What fields were involved in those work experiences you consider important? Please list.

List employment experiences which occurred after completing your formal education, but before you began your own business.

<table>
<thead>
<tr>
<th>Job</th>
<th># of years</th>
<th>Reason for leaving</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Of the above experiences, star (*) those which you feel to have influenced your decision to begin a business.

(Fold in thirds for postpaid mailing)
In the following list of extracurricular activities, check those in which you participated and those which you believe to be important in influencing your decision to develop a business (if applicable) or in helping you to manage one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scouting</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>FFA-FHA</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Jr. Achievement</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>NHS</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>4-H</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Class officer</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Social organization</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Other</td>
<td>___</td>
<td>___ specify:</td>
</tr>
</tbody>
</table>

In the following list of courses, please check those you feel have been important to you in developing a business or managing an existing business.

<table>
<thead>
<tr>
<th></th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Mathematics</td>
<td>___</td>
<td>___</td>
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<tr>
<td>Physical sciences</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Social sciences</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

In the next list of courses, check the "Participated" column if you had the course. Check the "Important" column if it influenced your decision to develop a business or if it significantly affected your ability to manage one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Economics</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Finance</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Management</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Marketing</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Statistics</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Other</td>
<td>___</td>
<td>___ specify:</td>
</tr>
</tbody>
</table>

Check (or list) your work experiences during your educational career under "Participated" and under "Important" if you feel they were influential in your decision to develop a business or in helping you to manage an existing business.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>delivered papers</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>did yard work</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>babysitting</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>retail store</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>service estab.</td>
<td>___</td>
<td>___</td>
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<tr>
<td>errand boy/girl</td>
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<tr>
<td>construction</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>farm work</td>
<td>___</td>
<td>___</td>
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<tr>
<td>other</td>
<td>___</td>
<td>___ specify:</td>
</tr>
</tbody>
</table>
CRITICAL LIFETIME EXPERIENCES OF ENTREPRENEURS: A PRELIMINARY ANALYSIS

Calvin A. Kent, Donald L. Sexton and Sharon Conard

I. BACKGROUND

Why do some people seek employment as managers in public or private organizations while others start their own businesses? Why are some people not satisfied to remain in the bureaucracy of corporations and instead strike out by initiating their own ventures. These questions have generated more research than any other area of entrepreneurial inquiry. Many researchers agree that entrepreneurs must have some special characteristic or type of personality which causes them to be willing to take the challenges associated with business start-up. Efforts to specify these characteristics, attitudes, experiences, or personality traits, however, rarely produced consistent conclusions.

Studies of the psychological characteristics of entrepreneurs, while providing descriptive information and raising interesting questions, have not significantly advanced the state of the art of understanding entrepreneurs. Until recently, research studies were based on small samples drawn from fairly narrow geographical areas or from particular industrial segments. The studies have addressed, to a large degree, the characteristics of successful entrepreneurs. A recent study by Cooper and Dunkleburg had a sufficient sample to overcome the problems of
regional geographics and industry segmentation. While the research efforts have described characteristics of successful entrepreneurs, the question still remains, "Are these characteristics different from those of unsuccessful entrepreneurs or from successful or unsuccessful professional managers?" Only recently have studies emerged which have utilized comparative data in an attempt to answer these questions.

A number of studies have discussed, as an aside, that successful entrepreneurs seemed to have similar experiences as children in school and as outside activities. These studies have been descriptive rather than statistical and the conclusions drawn were based on observed experiences of entrepreneurs only. Often these studies base conclusions on antedotal evidence obtained from a limited number of entrepreneurs. There have been few comparative studies of the effect of the experiences encountered during the formative years on the choice of venture initiation as an alternative occupational or vocational career path in later life.

It can be hypothesized that activities in which children and young adults participate during their formative years influence their occupational career path. These activities may be intertwined within and outside of any formal education received. If a relationship can be established between certain childhood activities (critical life-time experiences) and occupational selection, and if entrepreneurs display a pattern of activities which are significantly different from those persons engaged in other
occupations, it may be possible to predict the choice of entrepreneurship as an occupation based on the activities selected by children and young adults. This study was structured to examine these relationships.

II. HYPOTHESIS

This study approaches the question from a different perspective by focusing on the lifetime activities and experiences of entrepreneurs instead of their psychological or sociological traits. It is designed to test the following hypotheses:

1. There are certain critical early lifetime experiences which have an impact on the decision to choose entrepreneurship as a career.

2. The critical lifetime experiences of entrepreneurs are different from those of professional managers.

3. Lifetime experiences can be used to predict the choice of entrepreneurship as a career path or to identify those individuals who possess a high propensity for entrepreneurship.

If these hypotheses can be verified, an examination of the experiences, both educational and extracurricular should be valuable in developing programs and curricula which encourage and nurture entrepreneurs. Educational experiences can be structured to include the types of activities which seem to propagate the entrepreneurial spirit.

Even if the above hypotheses are proven, the point could still be argued that the psychological or social environment of
the entrepreneur led to participation in these critical lifetime activities while discouraging participation in others. Though these experiences may seem to produce the tendency towards entrepreneurship, they may reflect instead a proclivity which is otherwise determined. Stated differently, it is possible that an effect rather than a cause is being measured. The methodology used here does not refute or support the validity of this contention.

III. METHODOLOGY:

A. Problems With Previous Studies

It is necessary to look at the methodology of previous research projects, which tend to focus principally on personality characteristics of entrepreneurs. Often these involve using personal interviews with a limited number of respondents. Results have varied to a large extent (37). Several problems with these previous studies exist.

1. Definition of Entrepreneur:

First, there has been no consistent definition of an "entrepreneur" used in these studies. Each study defines the phenomenon somewhat differently. This in turn causes some discrepancies in the results. This is partially due to the lack of a workable definition of "entrepreneur" universally accepted in the field of management and behavioral science. Gough recognized this problem. He contrasts the "entrepreneur" with the "business man" as "the person who organizes and directs
Kirzner cautions that many have been misled to comprehend:

the notion of the entrepreneur as nothing more than the locus of profit-maximizing, decision-making within the firm. They have completely overlooked the role of the entrepreneur in exploiting superior awareness of price discrepancies within the economic system" (27, p.27).

Deeks points out in his work that McClelland's evidence concerning entrepreneurs was derived from executives and managers:

Since no instruments of job analysis were available to decide which managers among the various groups studied were acting in entrepreneurial roles, the terms entrepreneur, executive, and manager were used interchangeably and no distinction was drawn between entrepreneurial and managerial success" (13, p.24-25).

Similar conclusions have been reached by others (19, p. 287; 27, p. 268).

In this effort it was decided to approach this problem of definition differently. Instead of placing persons into one of two categories (entrepreneur and non-entrepreneur), an occupational classification system was used with four values. This provided "levels"
of entrepreneurship which coincide with various definitions of the term. An entrepreneur is usually defined as a person who assumes the financial, psychological and sociological risks of starting a business, bringing about substantial growth in the firm through innovative technology, management or improving marketing processes. However, broader definitions of entrepreneurs would include individuals in all of the classifications employed in this study. The occupational classifications used are:

a. Managers: Those who manage a business which they did not initiate and hold no significant share of ownership.

b. Acquirers: Those who acquired an existing business and are now serving as the owner/manager, but in their own judgment, have not expanded the business significantly since acquisition.

c. Developers: Those who acquired an existing business and, in their own opinion, have significantly expanded or developed the business since acquisition and continue to own and operate it.

d. Initiators: Those who initiated their own business and continue to own and operate it.

In this study, those who classified themselves as "managers" were used as the control group. Those in the other three groups were considered to be entrepreneurs and were compared to the manager group.
2. Improper Methodology:

A second problem involved in past efforts has been lack of statistically sound or acceptable methodology. Many studies have examined entrepreneurs, but have neglected to compare their characteristics with those of a control group. Others have used a control group of managers or the general population, but have neglected to examine the statistical significance of any differences discovered. In many cases, interesting results have been stated, but it is difficult to attach any conclusion when no statistical verification has been present.

Collins and Moore present a picture of the entrepreneur (8). They examined the childhood of each and gave characteristics, however, they do little to contrast them with a control group and no statistical reliability levels are presented. Further problems are encountered in the use of interviews, use of only 150 persons in a group, and the problems inherent with the Thematic Perception Test (8, pp. 28-29).

Deeks (13) presents research findings which are limited by sample size, bias of respondents from only one geographical area and encompassing only one industry. Statistical problems appear due to these limitations. Also, the study was based on the perceptions of various interviewers which could have affected the findings.
3. Appropriate Sample Size:

A third difficulty encountered in past studies is whether a sample of pertinent size was used. The ideal study would involve a random sample of the entire U.S. business population. Most samples used in other studies have not been random and have been limited to a small geographic area or heavily concentrated in certain industries. The small number sampled in most studies limits the application of statistical methods which, in turn, limits the meaningfulness of results obtained and conclusions drawn.

4. Use of Personal Interviewer:

A fourth problem in previous work is data obtained through personal interviews. This method offers the opportunity for bias generated in the perceptions of the interviewers. Variations in responses received through previous inquiries may have resulted from the use of more than one interviewer in the field.

In order to accomplish the objectives of this study and obtain statistically significant results, it was necessary that the methodology employed meet several criteria.

a. A sample of business persons representative of the general population of entrepreneurs and managers, sufficiently large enough to provide statistically significant data while surpassing geographic and industrial boundaries, must be obtained.
b. A control group of professional managers had to be assembled for conducting comparative analyses.

c. Well-defined groups or classifications for respondents were delineated.

d. A test instrument designed to provide objectivity and validity, which could be administered in a relatively short period of time and without personal contact, had to be developed and tested.

B. Development of the Survey

Early in the project it was decided not to use personal interviews as the principal means of data acquisition. In order to develop a sufficient data base from which an evaluation of lifetime experiences and significance in promoting entrepreneurial activity could be derived, it was desirable that a large number of respondents be sampled. The need for a large sample created budgetary constraints which precluded the use of direct personal interviews as a means of obtaining information. Due to the hindrances of time and funds required to obtain data from a nationwide sample, it was decided a mailed form would be the only practical method of obtaining a relatively large data base for examination. A survey was developed which could be conducted at minimal expense covering a large number of respondents without introducing the error inherent in personal interviews. The survey was detailed, covering numerous aspects of childhood: educational experiences, work experiences, school groups and
extracurricular activities. Each activity or experience was to be rated as to importance of contribution that activity made in that individual's decision to begin a venture and how useful it was in business development. A comprehensive list of experiences was included.

At the same time, a different approach was taken by developing a completely open-ended form. Both forms were preliminary efforts toward the development of one suitable for use with a large sample. The authors critiqued not only the value of responses received, but the instruments themselves based on comments from the respondents.

For the first trial entrepreneurs were chosen and asked to complete and return the survey, as well as criticize the instrument on the bases of 1) clarity; 2) difficulty in completion; 3) appropriateness of questions. This sample included selected members of the Advisory Board of Hankamer School Of Business at Baylor University, who had started and developed their own business, as well as other selected entrepreneurs known personally by the researchers. There was a total of nineteen persons in this initial group.

Upon questioning the nineteen respondents after their completion of the preliminary survey forms, there was near unanimous agreement on several points. Most did not believe the detailed form was a good way to obtain the information desired. The information which they believed the researchers should want and what actually was wanted did not coincide, although an accompanying letter explained fully the
purpose of the survey. While most of the respondents agreed an open-ended form would be preferable to the detailed survey, two of the nineteen were firm in their belief that only a personal interview could possibly glean the information desired.

Since the consensus among the original survey group was that an open-ended form would be superior, the next trial consisted of a redesigned open-ended form which was mailed to eighteen additional entrepreneurs known personally by the researchers. This was not meant to be a representative sample of entrepreneurs, but criticism of the form in the trial stages was considered important. Eight of the eighteen responded by mail within two weeks; two other responses were received about a month later. Those who had not responded by mail were interviewed within three weeks after they had received the survey. In all, the staff either interviewed or received written responses from all eighteen persons. In addition, five other interviews with entrepreneurs were conducted, structured in the same format as the second open-ended questionnaire, but the respondents had not previously been mailed a survey. Their responses were spontaneous.

From the oral and written responses to the second trial survey, a summary of comments and criticisms was compiled from which yet another survey was constructed. This survey listed specific lifetime events, but the events were chosen
from the responses which had been noted during the earlier surveys. The selection eliminated many questions which proved an irritant to respondents in the first trials. It also allowed the researcher to base the questionnaire on actual activities in which entrepreneurs had participated during their formulative years.

This third survey was evaluated by twenty additional entrepreneurs, then simplified in several ways. A list was compiled of all the possible pairs of factors. Since the respondents were requested to rank several factors as influencing or not influencing their entrepreneurial decision, they could rate all of them by examining only two factors at a time. This rating method is considered by several authorities to be a more consistent and reliable means for merging the varied interests of all respondents (20, pp. 176-178; 10, pp. 41-42).

The determination was made that a majority of the experiences listed occur at a specific time in one's life. For example, paper routes and yard work usually occur in the late pre-teen and early teen years. For that reason, it was not necessary to inquire as to when the respondent participated. The questionnaire simply asked if the person participated in the activity and if he/she felt the activity was important in the initiation or development of their business.

C. The Final Survey Form

The form used for the large mailing (Exhibit I) was a
TABLE I

FACTORS AND CRITICAL LIFETIME EXPERIENCES USED IN THE ANALYSIS OF ENTREPRENEURIAL TENDENCIES

PERCEIVED FACTORS FOR SUCCESSFUL BUSINESS INITIATION:

- Aggressiveness
- Education in Business
- Adequate Capital
- Desire to Make Money
- Manager's Experiences and Attitudes
- Intelligence

EDUCATIONAL EXPERIENCES:

- Accounting
- Economics
- Finance
- Marketing
- Management
- Statistics
- National Honor Society
- Technical-Trade School
- Speech - Drama
- Musical Organizations
- Journalism
- Class Officer
- Conventions
- Seminars

EXTRACURRICULAR EXPERIENCES:

- Athletics
- Scouting
- Junior Achievement
- 4-H
- FFA - FHA
- Social Organizations
- Farm Worker
- Paper Delivery
- Yard Work
- Retail Store Clerk
- Service Employee
- Errand Person
- Construction Worker
three-page, self-mailing survey. The questions were structured so that the respondent had only to check or circle responses unless they wanted to elaborate in detail. In order to make clear the intent of the survey, the purpose for each question being included is explained below. In the cover letter, the goals of the survey were identified (Exhibit II) and an attempt was made to explain the origin of this survey and its purpose.

Table 1 lists the specific items covered by this survey. The data on sex, age, education and number of years in business was requested so that the characteristics of the sample as a whole could be compared to the characteristics within each of the occupational groups and any correlation could be observed. The first question in the survey was an effort to determine whether the respondent could be classified as an entrepreneur or a manager. Since the definition of an entrepreneur is somewhat nebulous, the authors structured the question so the replies would form a continuum.

The first group was the "manager" who had no ownership in the business he managed. Next was the acquirer who bought an existing business, but did not "significantly" develop it after acquisition. Whether the acquirer significantly developed the business was left solely to the judgment of the respondent. The third level was labeled "developer," and included not only one who acquired a business but also developed it "significantly" beyond the point at which
January 15, 1980

Dear NFIB Member:

The Center for Private Enterprise and Entrepreneurship at Baylor University and Venture Assistance, Inc., are cooperating to conduct a nationwide study concerning the backgrounds of entrepreneurs and managers. The National Federation of Independent Business has supported us by mailing this survey to selected members. We believe that you, as a successful businessperson have special knowledge and expertise which can help us identify the educational experiences most useful to you in developing your venture.

Goals of the survey:
To determine which educational experiences are important to initiation of business ventures.
To gauge the importance of these experiences in influencing the decision to begin a business.
Use the information gained to structure entrepreneurship education programs.

We have made an effort to design the enclosed form so that it can be completed in a short time with minimal effort. If, however, you would like to add any comments, we would appreciate your effort.

We would be happy to send you a copy of the results of this study as a token of our thanks for your help. Please respond to the survey, and fold for postpaid mailing. Your reply will remain confidential.

Thank you very much for your time, interest, and support.

Sincerely,

Calvin A. Kent, Ph.D.
Director

Calvin A. Kent, Ph.D.
Herman W. Lay Professor of Private Enterprise

Donald L. Sexton, Ph.D.
Director of Entrepreneurship Programs
SURVEY OF ENTREPRENEURS AND MANAGERS

Name ____________________________ Sex _____ Age _____ Years in business _____

Address __________________________ City __________________ State _____ Zip ______

Phone __________________________ Education Completed _______________________

Check the statement(s) which best describes you:

  ____ I manage a business owned by others.
  ____ I have begun a new business.
  ____ I have bought an existing business and developed it significantly.
  ____ I have bought an existing business and operated it essentially as it was.
  ____ Other: ____________________________

If you have never developed a business of your own:

Do you have a strong desire to do so?  ____ Yes  ____ No

If you had the opportunity to start your own business right now, would you quit your current job and do it?  ____ Yes  ____ No

Consider the importance of the following factors for successfully starting a business:

  A. Aggressiveness
  B. Education in business
  C. Adequate capital
  D. Desire to make money
  E. Manager's experiences and attitudes
  F. Intelligence

In each of the following pairs of letters, circle the letter of the factor (as listed above) which you feel to be more important for success in starting a business.

A B C B C E A C D B C F E D A E

B F F D A F C D E F D A B E

In the following list of experiences, please check those in which you participated in the spaces provided on the left. Check the "Important" column if it was important to your beginning or developing a business (if applicable) or in managing one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musical organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech-Drama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical-trade school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the following list of extracurricular activities, check those in which you participated and those which you believe to be important in influencing your decision to develop a business (if applicable) or in helping you to manage one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scouting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFA-FHA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the following list of courses, please check those you feel have been important to you in developing a business or managing an existing business.

<table>
<thead>
<tr>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Physical sciences</td>
<td></td>
</tr>
<tr>
<td>Social sciences</td>
<td></td>
</tr>
</tbody>
</table>

In the next list of courses, check the "Participated" column if you had the course. Check the "Important" column if it influenced your decision to develop a business or if it significantly affected your ability to manage one.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check (or list) your work experiences during your educational career under "Participated" and under "Important" if you feel they were influential in your decision to develop a business or in helping you to manage an existing business.

<table>
<thead>
<tr>
<th>Participated</th>
<th>Important Developing</th>
<th>Important Managing</th>
</tr>
</thead>
<tbody>
<tr>
<td>delivered papers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>did yard work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>babysitting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>retail store</td>
<td></td>
<td></td>
</tr>
<tr>
<td>service estab.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>errand boy/girl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>farm work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you have **begun or significantly developed a business** which you took over, please complete the following questions.

Did one of your parents significantly influence your decision to start a business?  

- Yes  
- No

- If so, was this parent self-employed?  
- Yes  
- No

- If not self-employed, what was his/her occupation?  

Was there another individual who had a great influence on you?  

- Yes  
- No

- What relationship did this person have to you?  

- Was this person self-employed?  
- Yes  
- No

- His/her occupation?  

Consider the importance of the following factors in influencing you to begin a business:

- A. Another businessperson (encouragement, example)
- B. Work experiences (what I learned from working for others)
- C. Circumstances (death of breadwinner, dismissal from job, opportunity)
- D. Personality (need to work for myself, inability to work with others)
- E. Formal education (what I learned in school)
- F. Family (example or encouragement of family members)

In each of the following pairs of letters, circle the letter of the factor (as listed above) which you feel to have been more important in influencing you to develop a business.

- A B C B C E A C D B C F E D A E
- B F F D A F C D E F D A B E

Did you have prior work experience in a field related to that of your first business?  

- Yes  
- No

- If so, do you feel this experience was important in your decision to begin your business?  

- Yes  
- No

Did you have work experience(s) in unrelated fields?  

- Yes  
- No

- If so, do you feel this was important in your decision to develop your business?  

- Yes  
- No

What fields were involved in those work experiences you consider important? Please list.  

List employment experiences which occurred after completing your formal education, but before you began your own business.

<table>
<thead>
<tr>
<th>Job</th>
<th># of years</th>
<th>Reason for leaving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Of the above experiences, star (*) those which you feel to have influenced your decision to begin a business.
TABLE 2

COMPARATIVE EMPLOYMENT OF N.F.I.B.
ACTION COUNCIL MEMBERS (ACM's)
TO THE
U.S. SMALL BUSINESS POPULATION

<table>
<thead>
<tr>
<th>S.I.C. CLASSIFICATION</th>
<th>Percent of ACM's</th>
<th>Percent of N.F.I.B.</th>
<th>Percent of U.S. SMALL BUSINESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 Agriculture</td>
<td>3.8</td>
<td>4.1</td>
<td>1</td>
</tr>
<tr>
<td>10 General Construction</td>
<td>10.6</td>
<td>10.3</td>
<td>10</td>
</tr>
<tr>
<td>20 Manufacturing</td>
<td>14.2</td>
<td>11.0</td>
<td>8</td>
</tr>
<tr>
<td>30 Transportation</td>
<td>2.2</td>
<td>0.9</td>
<td>4</td>
</tr>
<tr>
<td>40 Wholesale Trades</td>
<td>10.0</td>
<td>6.8</td>
<td>9</td>
</tr>
<tr>
<td>50 Retail Trades</td>
<td>25.2</td>
<td>26.6</td>
<td>29</td>
</tr>
<tr>
<td>70 Finance, Real Estate</td>
<td>13.5</td>
<td>6.2</td>
<td>10</td>
</tr>
<tr>
<td>80 Non-Professional Services</td>
<td>9.6</td>
<td>12.4</td>
<td>)28</td>
</tr>
<tr>
<td>90 Professional Services</td>
<td>9.4</td>
<td>4.9</td>
<td>)</td>
</tr>
<tr>
<td>99 Other</td>
<td>1.6</td>
<td>15.9</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Ibid.
it was when acquired. Again the "significance" of the development was in the judgment of the respondent. The fourth level was that of "initiator," one who began the venture under his direction and ownership.

Since it is possible that one might be a manager now, but possess entrepreneurial inclination which might cause him/her to start a business in the future, the second question asked was about their desire to begin a business if they had never done so. Only if a respondent reported both a strong desire to develop a business and the willingness to quit his current job to begin one if the opportunity were present did the staff consider the respondent to have a desire for entrepreneurship. These people were not classified with the "acquirer" or "initiative" groups; a separate analysis was run on them as a sub-group.

Respondents were asked to rank a group of psychological traits according to the importance the respondent felt could be assigned as factors in starting a business. These traits were those found by other investigators as possibly distinguishing entrepreneurs from business managers. In order to get a more reproducible result, all possible pair combinations of these traits were grouped and those persons surveyed were asked to choose the more important factor in each pair. From this selection process, the traits were ranked.

Next, five different groups of lifetime activities were listed: extracurricular, common grade-school and high
school courses, post secondary courses, and work experiences. These lists were compiled from the answers obtained during the preliminary studies which developed the final questionnaire. The respondent was asked to check the activities in which participated, then check whether that activity was important to him/her in starting or managing the business. From these experiences, the researcher hoped to be able to differentiate between entrepreneurs and managers by ascertaining which lifetime experiences might have led people to develop the appropriate attitudes and desires for venture initiation.

The last page of the questionnaire was structured for those who classified themselves as "acquirers", "developers" or "initiators". These questions considered the importance or influence of other individuals on the respondent's decision to start a business, and the occupation and relationship to the respondent of the ones who influenced them.

Also included on the last page was a list of factors which were to be ranked by the respondent as to the importance attached in influencing the decision to begin a business. The methodology used was similar to the one used in the previous ranking. The last question in the survey concerned the work experiences of the respondents and the importance of those experiences in the decision to begin a business.
D. Development of an Acceptable Statistical Methodology

In this study an effort has been made to develop methodology which maintains statistical integrity. This has necessitated the use of certain techniques which, although they may not be optimal in every sense, provide a sample of sufficient size to examine subjects in a consistent manner within the budgetary constraints of the project. One of the foremost reasons for developing this methodology was the lack of precision in previous studies. In many instances, conclusions have been drawn concerning entrepreneurs without citing the possibility these findings could have been random occurrences. Other research efforts have claimed certain characteristics pertain to entrepreneurs with no comparison to a control group representing either the general population or managers. Conclusions in previous studies were based on samples which were very small, limited in scope geographically and to type of industry or size of firm.

It is imperative that results be examined in view of statistical tests of significance. Although trends which are insignificant may be interesting and important for further research, the statistically significant results should be the primary consideration. A major goal was to develop a large data base from which the study could be made and which would overcome the problems mentioned above. Any conclusions reached would be given within statistical limits and would not only be more reliable, but also more reproducible than former research efforts.
E. The Sample

Several requirements had to be met in the selection of the sample for the survey. Although a random sample of the entire business population of the United States would have been ideal, this approach would have been impractical. Instead, a sample more readily available was needed which would provide nationwide coverage over many industries and firms of various sizes. It was desirable in this study to examine successful people, since one of the goals of the research was to help structure educational programs which would develop successful entrepreneurs in the future. It was also desirable to have a control group of managers included to allow for comparisons between the four groups in the occupational classification.

The National Federation of Independent Business provided a mailing list which met all the above requirements and an appropriate sample size as well. The list was comprised of the NFIB's 8,400 Action Council Members. (The entire membership of the NFIB is approximately 540,000. Of these, NFIB employees recommend those judged to be successful for inclusion in the Action Council. An important factor is that their "success" is measured by NFIB employees, not the "ACM's." This determination is made after one year or more of membership in the organization.) "ACM's" are generally people active in community affairs as well as in the NFIB.
For purposes of this study, a minimum of 1,000 survey responses were wanted. A wide overlap of experiences among those in the various occupational classifications was expected. A large number of respondents were required for assurance that any trends noted were not random and adequate responses were available for all categories.

A large response was also required since numerous independent variables were included, each with at least two distinct values, so that data for all possible outcomes would be available (18, p. 13). Hoping for a response rate of 25 percent, a sample of 4,000 was needed. Since any mailing larger than this would be cumbersome and in excess of the project budget, it was decided that only half of the ACM's would be sampled. To preserve the integrity of the study, a "systematic sample" (20, pp. 224-226) was drawn which included every other name on the zipcoded mailing list yielding a total of 4,200 names. The zipcoded list provided a sample representative of the population geographically and introduced no bias concerning industry or size of firm. Further, because of the attributed success, it was anticipated that the Action Council Members could be depended upon to respond.

It may be argued that the membership roster of the National Federation of Independent Business is biased towards independent businesses at the exclusion of members of large corporate structure. The authors recognized and
accepted this limitation because, at the same time, it pro-
vided for closer comparison between managers and entrepre-
neurs from firms of similar sizes.

The survey was mailed on January 16, 1981, and responses
were collected for nine weeks following. Fifteen hundred-
forty-one usable replies were returned for a response rate
of 37 percent. The time of cutoff for accepting replies was
calculated within the bounds of other time constraints as
reported by Huxley (23, pp. 63-68). This proved a reason-
able time since only 20 responses were received in the four
weeks following the cutoff date.

The NFIB gathered the following amounts of data con-
cerning these Action Council Members. A comparison of the
respondent's businesses (according to S.I.C. code) with the
occupations of the non-farm sector in general is given in
Table 2.

Since 50 percent of the ACM list was drawn for the sur-
vey sample and a 37 percent response rate was received,
18.5 percent of the total Action Council members provided
information for the data base. This provided some assurance
that the sample has very similar characteristics to those of
the business population as a whole. The valid responses
were classified as follows:

<table>
<thead>
<tr>
<th></th>
<th>Total Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>111</td>
<td>7.2</td>
</tr>
<tr>
<td>Acquirer</td>
<td>171</td>
<td>11.1</td>
</tr>
<tr>
<td>Total Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Developer</td>
<td>488</td>
<td>31.7</td>
</tr>
<tr>
<td>Initiator</td>
<td>771</td>
<td>50.1</td>
</tr>
</tbody>
</table>

Using a sample proportion of 0.4 and a confidence level of 95 percent, the accuracy (bounds) with which the responses represent the population from which they were drawn are ±10% for managers, ±7% for acquirers, and less than ±5% for developers and initiators.

F. Use of a Control Group

The drawing of any conclusions about the characteristics or experiences of entrepreneurs is virtually meaningless unless it can be demonstrated that these characteristics or experiences differ significantly from those of a control group of non-entrepreneurs. In this case, those who classified themselves as "managers" were chosen as a control group and any findings for the other three groups (acquirer, developer, initiator) will be compared to the "managers'" attributes and experiences.

G. Validity Tests

Within the structure of the survey, several tests for validity were included. One example is enumerated here with results. The question, "Did one of your parents significantly influence your decision to start a business?," was correlated with the perceived importance of family influence. Forty-seven percent of those respondents who said their parents influenced their decision to initiate a business listed "family" as the most important of six factors.
Only 13% of those who did not indicate parental influence gave the family factor as most important. This correlation had a significance level of essentially 0 (Reference: Run 3-23-81, page 20). The question, "Was there another individual who had a great influence on you?," was correlated with the perceived importance of another businessperson's influence. Again, the significance level yielded was 0. Eighteen percent of those who indicated "no influence" from other people also indicated another businessperson as the most important factor in their decision to start or develop a business, while forty-six percent of those who did acknowledge the influence of another person gave "another business person" as the most important factor (Reference: Run 3-23-81, p. 27). This relationship is not as strong as the "family" correlation, since 37 percent of the "other individuals" who exerted influence were family members (Reference: 3-23-81, p. 35). These results and similar cross tabulations indicate that the responses of survey participants are highly reliable.

H. **Statistical Techniques in Analysis of Data**

Each type of analysis as well as applicable tests of statistical significance are discussed in this section. This is not intended to be an exhaustive treatment of the mathematics involved, but a description of the techniques used and an explanation of why these techniques were chosen.
All data compilation and manipulation was done on a Honeywell 620 computer with the SPSS program (30) and the statistics discussed will be as calculated in that program.

1. Frequencies (30, pp. 181-202):

This subprogram was used to obtain descriptive statistics for the sample. It was a preliminary measure to further analysis and provided a means of examining the variability of the data while describing the sample itself. Output from this subprogram lists each category of a variable, the frequency with which responses fall into each category, a frequency in percent relative to the population under consideration (the sample), a frequency which has been adjusted for any missing data, and a cumulative frequency. For visual observation of variability, histograms were printed in some instances. It is also possible to either ignore or include missing data as desired.

Statistics available in this subprogram include the minimum, maximum, range, mean, standard error, median, mode, standard deviation and variance, as well as indicators of kurtosis and skewness. Any combination of these can be chosen depending on requirements and level of measurement of the variable.

2. Cross Tabulation—Contingency Tables:

The subprogram "Crosstabs" provides a means of measuring the relationships among variables by giving a
joint frequency distribution. The distribution of cases is shown in contingency tables which are part of the output. This only can be accomplished for the discrete yield, which is the probability of obtaining the given chi-square if the variables are indeed independent. Since larger samples are closer approximations of the population, smaller deviations can produce statistically significant results.

It should be noted that chi-square alone cannot be related to the strength of a relationship between two variables. It can only give bounds for deciding whether or not a relationship exists. In this study, Cramer's V, lambda and uncertainty coefficients were calculated. Cramer's V ranges from 0 to 1 with a larger V indicating a stronger association. Asymmetric lambda indicated the improvement in ability to predict the dependent variable once the value for the independent variable is known, with a maximum value of 1.0. The value of lambda is actually the percentage improvement in predictive ability and assumes only nominal-level measurement. It also assumes that with no knowledge of the independent variable, one would predict using the dependent variable with the greatest frequency.

The uncertainty coefficient is similar to lambda in that it assumes nominal-level variables. The asymmetric uncertainty coefficient is certainty.
For ease of manipulation, all statistics were calculated for all tables, but the applicability of each of the statistics for variables involved must be considered in the interpretation of the results.

3. Discriminant Analysis (30, pp. 434-467):

After determining from the cross tabulation analyses that a relationship might exist between the occupational class ("manager," "acquirer," "developer," or "initiator"), and the lifetime experiences of respondents, the objective of predicting into which occupational classification a respondent would fall based on the lifetime activities, attitudes and traits became more realistic.

Given two groups, "managers" and "initiators," the researcher attempted to develop an equation to assign respondents to the correct occupational group based on the responses to survey questions (3, p. 145). As described in the K4 SPSS manual, "The mathematical objective of discriminant analysis is to weight and linearly combine the discriminating variables in some fashion so that the groups are forced to be as statistically distinct as possible" (3, p. 435). Even though discriminant analysis can accomplish this objective, certain problems exist if it is used without caution in the interpretation of results and accompanying statistics.
In this study, it was desirable to eliminate the subjectivity of the participants as to their occupational classifications. In order to do this, only the extreme classifications ("managers" and "initiators") were examined. The criteria for classification as a "manager" or "initiator" was fairly obvious, but a gray area existed regarding the "acquirer" and "developer" classification since the respondent had to estimate the "significance" of any expansion of the business after acquisition.

Limiting the analysis to just two groups was advantageous in another way. Discriminant analysis is greatly amplified when the criterion variable is dichotomous.

Assessing the effect of independent variables in discrimination is easier (20, p. 331). When more than two groups are involved, one variable might discriminate best between groups 1 and 2 while another might do best between 2 and 3 (1, p 140; 3, p. 146).

Another type of subjectivity was encountered when the respondents were asked to judge the importance of the various experiences in developing and/or managing a business. This was eliminated by considering only responses of participation vs. nonparticipation for each of the activities in the discriminant analyses.

In one of the three discriminant analyses performed, the perceived importance of six factors for
success was considered. These factors were recoded to a binary value with 1 being "most significant" and 0 being "not most important." In this case, the result is subjective but still meets the zero-one criterion. Again, this recoding proved to have other benefits. Discriminate analysis is designed for predictor variables which are interval scaled (20, p. 331). This requirement can be effectively circumvented by recoding nominal or ordinal scaled values using "dummy variables" (3, p. 38-41; 18, p. 6-9; 33, p. 98-100). By recoding the independent variables to eliminate subjectivity, zero-one values were produced for nominally scaled data. Other variables--age and education--are interval scaled so recoding was not required.

The problem in using this type of analysis for discrete data has been explored. Many researchers have treated ordinal variables as though they were interval. Those who support such treatment (18, p. 98-99) argue that statistics apply to numbers and the validity of results is not dependent on the measurement model. It must be said, however, that results need be interpreted within the framework of measurement and the actual meaning of the variables. If variables are coded in a manner consistent with their intuitive meanings, problems are greatly reduced. Models have been developed for discrete discriminant analysis (18),
and alternate techniques for similar analysis have been developed (3).

The approach used in this study was to employ the traditional methodology, simplifying the data structure to meet the requirements. This allowed the use of a readily available SPSS program which concedes that some of the assumptions of discriminant analysis, multivariate normal distribution of discriminating variables and equal variance/co-variance matrices within each group, need not be adhered to strongly (30, p. 435).

With these problems in mind, it was necessary to examine the statistical tests of significance which were used for the results obtained. The program calculated the mean and standard deviation of each variable for each group as well as for the total sample. For each independent variable, Wilks' lambda and univariate F-Ratios are given with the level of significance. The values for Wilks' lambda indicates the power of the variable to aid in prediction. Approaching 1.0, the result indicates less power. A Wilks' lambda very close to 1.0 can still have significance since there are 830 degrees of freedom in the calculation used in this study. This statistic is transformed into a chi-square and the corresponding level of significance is given.
The univariate F-Ratio for each variable shows its incremental contribution after all other variables have been introduced into the equation. Higher values indicate a greater contribution. The significance level is the probability of a given Wilks' lambda occurring due to chance, if no relationship exists between the independent predictor variable and the dependent variable of occupational classification.

After examination of the variables themselves, three groups of variables were chosen to perform three discriminant analyses. These will be discussed in the data analysis sections. In this section, the statistics which accompany each analysis will be explained.

a. Eigenvalue: Measures the importance of discriminant functions in relation to each other. Since this analysis deals with a dependent variable which has only two groups, "manager" and "initiator," only one discriminant function can be developed. "The maximum number of discriminant functions to be derived is either one less than the number of groups or equal to the number of discriminating variables, whichever is smaller" (30, p. 442). Therefore, the relative percentage and cumulative percentage of the one eigenvalue given for one possible discriminant function in this research must be 100%.
b. Canonical Correlation: This is a measure of association between the discriminant function and the variable defining group membership. This value is another way of measuring the relative importance of more than one discriminant function...."another measure of the function's ability to discriminate among the groups" (30, p. 442).

The eigenvalue and canonical correlation are not important for consideration in determining the statistical significance of the functions developed in three discriminant analyses. The remaining types of values discussed here are used for this purpose: "to test for the statistical significance of discriminating information not already accounted for by earlier functions" (30, pp. 442-443).

c. Wilks' Lambda: An inverse measure of the discriminating power in the original variables which has not yet been removed by the discriminant functions (30, p. 442). Or, in more intuitive terms, this statistic gives us some idea of the ability of independent variables to predict the value of the dependent variable using the equation developed. A value of "1" would indicate that all of the
discriminating power is present in the equation. Zero would indicate complete inability to discriminate.

d. Chi-Square: A statistic which helps decide if a relationship exists between variables. It is influenced by sample size and the number of values which exist for each variable (table size for contingency tables). A very large chi-square indicates that a relationship exists, while a small value would indicate statistical independence (30, pp. 223-224).

e. Significance: This measures the probability that a Wilks' lambda equal to or less than the one given could occur due to chances of sampling, even if all information was accounted for in the equation. In each of the three analyses, the significance value indicated there was information to be accounted for by a discriminant function. Discussion of specific values for each analysis will be given in a later section.

III. SUGGESTED IMPROVEMENTS IN THE SURVEY FORM

Even though the survey was pretested and developed after several trials, problems have been recognized with the form which should be corrected before using it for further research efforts.
These problems were circumvented in this data analysis so the results here were not significantly affected. However, the coding of data for analysis would be greatly simplified and generate more meaningful results if some of the questions on the form were altered.

A. "Years in Business"

This question was ambiguous. Some interpreted it as "years in current business," others as "years since initiating first business." Since the last response was the one desired, the question should have been stated in that fashion.

B. "Check the Statement Which Best Describes You"

To determine his/her occupational classification, the respondent was asked to: "Check the statement which best describes you." Two improvements should be made in this question. First, a method should be developed to reduce the subjectivity involved in the respondent's selecting either the "acquirer" or "developer" category.

A person who has acquired an existing business must make a judgment as to whether he/she "significantly developed" the business, or "operated it essentially as it was." A request for financial data to analyze the significance of development would almost certainly introduce a large non-response bias. A question concerning "percentage increase-decrease in sales" would often be answered with an inaccurate guess by the respondent which would provide little, if any, improvement over the present question.
In addition, the existence of inflation will cause gross sales to rise even if there has been no real expansion. One suggestion would be to ask "How long have you 'owned/did you own' this business?" and "Have the sales for this business increased by more than a given percentage?" From these numbers a growth index could be calculated and respondents placed in one of these categories based on the index.

The second problem in this area was the statement, "I have bought an existing business." This created a dilemma for respondents who acquired the business in another way, inheritance or possibly in payment of a debt, or by other means. This should be changed to "acquired an existing business". It could be argued that those who inherit a business are not entrepreneurial, but they had the option of disposing of the business instead of operating it.

C. "Check the 'Important' Column"

In the list of activities, the respondent was asked to "check the 'Important' column if it was important to your beginning or developing a business (if applicable) or in managing one." The intent was for "developers" and "initiators" to evaluate each activity's importance in developing and managing.

"Managers" and "acquirers" should have evaluated only the importance of activities in managing as they had never initiated a business. Surveys returned, however, proved to
contain numerous instances in which present "managers" and "acquirers" (who stated they had never developed a business) did evaluate the importance of the variables in the development of a business.

Examination of results indicated "managers" did check "important in managing" columns more frequently. For this reason, the differences in response between the four occupational classifications were difficult to evaluate. Much of the difference could be attributed to the structure of the question. This problem was eliminated by coding the data so that "participation" and "importance" in either category—managing/developing—or both were examined. In this way, the tendency of managers to answer the questions they were not qualified to judge was ignored and no false significance in the differences among the four classifications was produced.

D. "List Employment Experiences Which Occurred After Completing Formal Education, But Before You Began Your Own Business."

This last request on the survey form created subjectivity on the researcher's part because the responses had to be categorized. Coding of data would be greatly simplified if the respondent could have checked items from a list of possible jobs held.

In general, time could be saved and accuracy improved if the form were organized so the responses could be precoded for computer. Inclusion of a separate answer sheet which could be read
by computer might reduce the response rate, but answers could be obtained in a format which could be read directly by a keypunch operator, possibly by the use of a template.

IV. LIMITATIONS

There are certain limitations with the survey methodology, as well as with the form, which are material here. Many of these problems are universal in mail surveys, but attention is called to the effect which these might produce in the results of this study.

A. Respondents

The respondents to the mail survey were Action Council Members (ACM's) of the National Federation of Independent Business. Since the systematic sample included 50 percent of Action Council Members and the response rate was 37 percent, the representation of respondents of the Action Council is an accurate representation of total NFIB membership and the population of small business.

The industrial classifications of the ACM's are roughly comparable to those of small business in the nation as shown before in Table 2. Workers in large corporations are underrepresented in the sample. However, the sample does allow the comparison of "managers," "acquirers," "developers" and "initiators" in businesses of similiar size, without the limitation of industrial and geographical boundaries. Since the goal of the study was to observe experiences of the respondents and determine differences in lifetime experiences
among individuals in the occupational classifications, the effect on these results should be negligible. Conclusions drawn concerning characteristic tendencies of the entire population of entrepreneurs from this sample must be tempered with the knowledge that the sample cannot be fully representative.

B. Bias from Non-Response

The other major form of bias is introduced by the non-response rate (34, p. 116-117). In questions concerning participation, the respondent checked only those activities in which he/she participated. Therefore, blank answers were accepted as lack of participation. If a respondent left all questions blank, it was assumed that the person was attempting not to answer and the reply was rejected as invalid. In some cases, only parts of the questionnaire were left unanswered. For those, results were coded to indicate missing data and analyses were adjusted to reflect the observations which were lacking.

In demographic questions, nonresponse introduces an error which cannot be readily estimated. For example, those who did not respond to "education completed" may have less education, on the average, than the remainder of the respondents but the difference cannot be ascertained. Based on the interviewing done to develop the questionnaire, it was felt that the older respondents would more frequently refuse to answer the questions asked than the young. Although the
direction of the bias introduced by nonresponse can be guessed, a numerical value cannot be estimated.

C. Self-Assignment to Occupational Class

The question allowing the respondent to assign himself-herself to an occupational class was crucial to the analysis. To eliminate a conflict of answered/non-answered questions, the respondents who did not classify themselves were eliminated from the study. It is interesting that only five respondents did not complete this question.

D. Lack of Success Measure

A possible criticism of this research effort could be the lack of a measure for success of the respondents. In many studies, attempts have been made to measure success based on economic variables such as salary, corporation size, net sales of a business, etc. The accuracy of such measuring is questionable since the respondent may tend to exaggerate the answer. This survey makes no attempt to measure success. Action Council Members are chosen by NFIB staff as successful business people. For this reason, it can be assumed this sample contains few, if any, failures.

Since the respondents are not asked to rate their own degree of success, one source of bias is eliminated. Another is introduced, however, as there appears to be no consistent criteria used by the NFIB to ascertain who should be included as an Action Council Member. The results are not comparisons of successful entrepreneurs to unsuccessful ones, but
of successful entrepreneurs to successful managers as rated by the NFIB staff.

V. DATA ANALYSIS

A. Characteristics of the Sample: Frequency Distributions

In one of the initial efforts to analyze accumulated data, a frequency distribution program was used to determine the distribution of cases among entrepreneurship classifications (Reference: Run 3-25-81 p. 1)

Table 3

<table>
<thead>
<tr>
<th>Classification</th>
<th>Absolute</th>
<th>Relative</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>711</td>
<td>31.7</td>
<td>2</td>
</tr>
<tr>
<td>Acquirers</td>
<td>117</td>
<td>4.7</td>
<td>1</td>
</tr>
<tr>
<td>Developers</td>
<td>488</td>
<td>38.1</td>
<td>0</td>
</tr>
<tr>
<td>Initiators</td>
<td>771</td>
<td>50.0</td>
<td>3</td>
</tr>
<tr>
<td>Total Valid Cases</td>
<td>1,541</td>
<td>100.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Median Value — 2.501 (ie., halfway between developers and initiators)

Of those who had never developed or initiated a business, it was asked if they had a strong desire to do so and "If you had the opportunity to start your own business right now would you quit your current job to do it?" If the respondent answered "yes" to both questions, the "desire" variable was coded "would start." Two hundred ninety-two responses (38%) indicated they would not start a venture, while 478 (62%) would (Reference: Run 3-25-81 p. 2).
The analysis of age distribution (Reference: Run 3-35-81) yielded 57 nonresponses (3.7%). For the remainder, a mean of 47.366 years was obtained, with a median of 47.658 and a range of 62 years (from 22-84).

The data on the "years of education" completed by those in the survey indicated a range of 4 to 22 years with a median of 15.668 and mean of 15.075 (Ibid pp. 9-11). There were 64 non-respondents, which constituted 4.2% of the sample.

When "years in business" was considered, the range was 1 to 65, with a median of 16.37 and a mean of 18.23. The nonresponse rate was also 4.2%. For those respondents classified as "developers" or "initiators", the educational breakdown is as follows:

Table 4

<table>
<thead>
<tr>
<th>Education Completed</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-Grade School</td>
<td>16</td>
<td>1.3</td>
</tr>
<tr>
<td>Some High School</td>
<td>207</td>
<td>17.1</td>
</tr>
<tr>
<td>High School-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>314</td>
<td>26.0</td>
</tr>
<tr>
<td>College Grad.</td>
<td>470</td>
<td>38.9</td>
</tr>
<tr>
<td>Graduate Work</td>
<td>202</td>
<td>16.7</td>
</tr>
<tr>
<td>No Reply</td>
<td>50</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>1,259</td>
<td></td>
</tr>
</tbody>
</table>

Frequency distributions were completed to determine if those included in the survey and classified either as "developers" or initiators" had participated in certain types of
business activities after completion of formal education. In addition, the authors wanted to know if the respondents felt these activities had influenced their decision to become a "developer" or "initiator." The frequency distribution is arrayed below:

**TABLE 5**

**FREQUENCY DISTRIBUTION OF SURVEY RESPONDENTS POST EDUCATION EXPERIENCE**

<table>
<thead>
<tr>
<th>Years Post-Education Experience *</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>212</td>
<td>16.8</td>
</tr>
<tr>
<td>4-6</td>
<td>170</td>
<td>13.5</td>
</tr>
<tr>
<td>7-10</td>
<td>247</td>
<td>19.6</td>
</tr>
<tr>
<td>11-15</td>
<td>238</td>
<td>18.9</td>
</tr>
<tr>
<td>16-20</td>
<td>146</td>
<td>11.6</td>
</tr>
<tr>
<td>over 20</td>
<td>149</td>
<td>11.8</td>
</tr>
<tr>
<td>No reply</td>
<td>97</td>
<td>7.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,259</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Before beginning business.

The participation rates for "developers" and "initiators," and the percentage who perceived participation in post-education work experiences as important in starting or developing a business is shown in Table 6.

Work experience in retail sales was listed most frequently by "developers" and "initiators" as a post-educational activity. It also commanded the greatest amount of perceived importance as a factor contributing to venture initiation or development. On the whole, the data is consistent with the conclusion that post-educational work
experiences are not a major factor in encouraging respondents to initiate and develop their own businesses.

TABLE 6
SIGNIFICANCE OF POST-EDUCATIONAL WORK EXPERIENCES

<table>
<thead>
<tr>
<th>Business Experience</th>
<th>Total Who Participated*</th>
<th>Participation Rate</th>
<th>Total Who Gave It Significance</th>
<th>% Who Felt It Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Sales</td>
<td>506</td>
<td>41.5</td>
<td>283</td>
<td>55.9</td>
</tr>
<tr>
<td>Retail Service</td>
<td>475</td>
<td>39.1</td>
<td>218</td>
<td>45.9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>160</td>
<td>14.1</td>
<td>70</td>
<td>43.8</td>
</tr>
<tr>
<td>Professional</td>
<td>160</td>
<td>14.1</td>
<td>78</td>
<td>48.8</td>
</tr>
<tr>
<td>Technical</td>
<td>308</td>
<td>25.8</td>
<td>132</td>
<td>42.9</td>
</tr>
<tr>
<td>Other (Armed Service, Government, Teach.)</td>
<td>211</td>
<td>18.3</td>
<td>48</td>
<td>22.5</td>
</tr>
</tbody>
</table>

*Includes those who participated in more than one educational activity.

B. Crosstabulation Analysis
1. Results for Participation in Lifetime Activities:

When the various early lifetime activities and courses listed in the survey were used as independent variables and the occupational classification was used as the dependent variable using the crosstabulation subprogram of SPSS, several interesting results were obtained. In the analysis, replies were recoded to indicate participation in the lifetime activity versus lack of participation. This eliminated any subjectivity involved in perceived importance as well as bias in the question structure which would encourage managers to answer "yes" to importance in managing, but "no" to importance in developing.
The Small Business Clinic/FINAL REPORT

The following report is an attempt to summarize and evaluate the activities and accomplishments of the Small Business Clinic, a joint project of the National Law Center and the Division of Experimental Programs of George Washington University, funded by U.S. Small Business Administration Grant Number SB-1A-00024-01-0, for the period September 1, 1980, through June 21, 1981.

I. Description of Program
   A. Administration
      The Clinic staff consists of a director, Professor Russell B. Stevenson, Jr., and a supervising attorney, Professor Lela P. Love. Professor Stevenson is a full-time member of the law faculty at the National Law Center and Professor Love is an Assistant Director of Experimental Programs for George Washington University, in addition to her teaching and supervisory responsibilities. Both Professors Stevenson and Love are members of the District of Columbia Bar.

      The Clinic director is responsible for participating in the weekly seminars, for being available as a resource when problems arise, for helping draft Clinic materials, and for general oversight of the program.

      The supervising attorney is responsible for the day-to-day operation of the Clinic, for reviewing all student work, for drafting Clinic materials, for participating in the weekly seminars, and for the overall functioning of the program.

      The Community Legal Clinic of the National Law Center (the umbrella organization of which the Small Businesses Clinic is a part) provides the secretarial support, office space and supplies, meeting and conference rooms, and xeroxing capability, which are crucial to the functioning of the Clinic.

   B. Students
      Five law students in the fall semester and six in the
spring semester participated in the Clinic. Although the students were predominantly third year students, exceptionally qualified second year students were also allowed to participate.

Since interest in business law is currently very high in law school, increasing student participation in the Clinic would pose no problem. In fact, there is a waiting list to get into the Clinic for the academic year 1981-82. However, since an average student caseload is 15 cases per semester, and since the overhead, including the secretarial and staff support, necessary to maintain a high quality practice increases dramatically with each additional student, eight students per semester is the maximum number currently feasible (i.e., with the supervising attorney devoting 50% of her time) and six students is optimal. Even at these numbers, it is doubtful whether the law school can indefinitely support the Clinic, given the high costs involved, absent some outside support.

C. The Teaching Function

A major goal of the Clinic is to provide useful clinical experience to students interested in business law, as well as essential background in the relevant substantive law areas necessary to advise small business clients (e.g., corporations, partnership, tax, agency). As part of the clinical experience, students use and evaluate classroom discussions of ethics and interviewing techniques by comparing actual experiences with clients and cases. Students report that presentations on substantive law give additional insight and have greater meaning when used to solve "real" problems.

Each week the Clinic holds a two-hour seminar in which either the director, supervising attorney, or guest speaker lectures or presents a topic for one hour, followed by a one-hour round table discussion in which students raise questions or problems that came up in their cases in the past week. A list of the topics discussed in the weekly
A seminar appears on page five of the Small Business Clinic Manual. Guest speakers included the Recorder of Deeds for the District of Columbia, the Chief of the District of Columbia Business License Division, representatives from the Small Business Administration, a social worker with expertise in interviewing techniques, a local practicing attorney with expertise in non-profit corporations, and other law professors from the National Law Center.

In addition to the weekly seminar, the supervising attorney is available every day to consult with students and review their cases' progress. No written work or advice of any kind issues from the students to clients without the approval of the supervising attorney. Consequently, stylistic issues of letter and memorandum writing and of drafting legal documents are also stressed, as every effort is made to make Clinic products of the highest quality.

D. Clients

Two hundred and eighty-seven clients contacted the Clinic in the ten month period between September 1980 and June 1981. The numbers of clients calling in any given month was a direct reflection of the publicity efforts made by the Clinic. These efforts included: memoranda sent to small business technical assistance programs (e.g., the Small Business Administration, the Service Corps of Retired Executives, Howard University's Small Business Development Center, and the Greater Washington Business Center); and a public service announcement released in September and late January by George Washington University to local television, radio and newspaper sources, indicating the Clinic offered free legal advice to local small businesses. One hundred and thirty seven (nearly half) of the small business clients called in September and February after these latter announcements were made, while only thirteen clients contacted the Clinic in December and June, the months furthest from the publicity. Thus, the Clinic found no difficulty in getting clients when desired.
Of the two hundred and eighty seven clients who contacted the Clinic, one hundred and thirty three (nearly half) were assigned to and directly assisted by a student. The remainder of the callers (one hundred and fifty four) either did not have a legal problem (as opposed to a business or accounting problem) or could not be helped because student caseloads were full. All clients who called the Small Business Clinic were asked what their question or problem involved and were referred, when appropriate, to one or more of the following: the Small Business Administration to obtain the S.B.A. free information kit; the Internal Revenue Service and the I.R.S. Small Business Tax Workshop; the Small Business Development Center at Howard University; the Service Corps of Retired Executives; the Support Center; the Minority Contractors Assistance Projects, Inc.; local lawyer referral services; and different agencies and divisions of the District of Columbia government. This referral service was emphasized because it was seen as a crucial component of the community service aspect of the project.

The breakdown of the type of student work done for clients (other than referral services which were provided for all clients) was as follows:

- advice regarding choice of organizational form -- partnership, corporation or sole proprietorship: 25%
- compliance with licensing and zoning requirements: 18%
- tax-related problems and questions: 16%
- actual incorporation of client's business -- for-profit corporations: 6%
  non-profit corporations: 5%
- drafting partnership agreements: 3%
- drafting or reviewing contracts: 11%
- miscellaneous (includes, for example: corporate and partnership dissolutions; government contracts dispute; trade name and copyright problems; collection problems; advice re federal liquor laws; shareholders' rights, and workman's compensation) 16%

Although there was no formal survey done to determine the clients' level of satisfaction with the work performed, the many expressions of appreciation to students and the complete
lack of any complaints from clients are indications that the clients were pleased.

E. Development of Materials

Five major efforts were made relating to development of Clinic teaching and practice aides and resources. These were: the establishment of a Small Business Clinic library; the creation of research files and form files; the compilation of relevant District of Columbia statutes into a statute book; the production of a practice-oriented manual; and the development of a form book. Each of these efforts will be discussed in turn.

1. The Library. Over the ten-month grant period, partially from funds supplied by the Small Business Administration Grant, partially from contributions from the Division of Experimental Programs, and partially from student donations, a small, but essential library was established. A description of library resources is contained on page four of the Small Business Clinic Manual. For the students' convenience, copies of all library materials were placed both in the Community Legal Clinic itself and also in the law school library on reserve. The presence of the library resources was invaluable in simplifying research, teaching, and learning tasks.

2. Research and Form Files. At the beginning of the grant period, all "dead" client files were gone through to extract any research materials, memoranda, or completed legal documents. These items were then copied and placed in separate research or form files, as appropriate. Over the course of the grant period, these files grew, as materials were added each time a case was closed. These research and form files quickly proved to be essential to the efficient running of the Clinic in that they frequently prevented duplicative research and greatly simplified the drafting of documents in cases where similar type documents had been previously drafted.
3. **Statute Book.** The relevant District of Columbia statutes that Clinic students must consult routinely in advising small business clients are contained in the 1973 edition of the District of Columbia Code. This latest edition of the Code has been augmented and revised each year by a Supplement, and some Supplements are not cumulative. Consequently, the task of checking to be sure that any particular Code provision is still effective is often time-consuming and frustrating, as the Code and each Supplement must be reviewed. The Statute Book developed by the Clinic (two copies of which are submitted with this report) has incorporated (by process of cutting, pasting, and copying) the latest revisions of the Code. The Statute Book, being a single source collection of the relevant statutory provisions, has proven an enormously convenient and effective resource tool.

4. **The Manual.** The Small Business Clinic Manual was written over the entire course of the ten-month grant period, each part in response to a particular need of the Clinic. This "organic" growth of the Manual has resulted in a product uniquely suited to needs of the Clinic. It is contemplated that the Manual will continue to grow in response to new directions in the Clinic (which is why a loose-leaf notebook was chosen as a binder). A chapter on non-profit corporations, for example, should be developed in the next year. The Manual is certainly an invaluable teaching aide. It was also designed as a model for other small business clinics in that every effort was made to make the Manual show how the Clinic was organized. Two copies of the Manual are submitted with this report.

5. **The Form Book.** One of the greatest problems confronted by the Clinic was adequate secretarial support to cope with the many lengthy documents produced by Clinic students. Consequently, a Form Book (each form in which is on the disk of a Qyx "Intelligent Typewriter System" owned by the Community Legal Clinic) was developed to simplify the secretarial task.
The forms themselves have been (and continue to be) frequently revised, but, nonetheless, they greatly enhance the efficiency of the Clinic. Obviously, students are told never to follow a form unless it is indeed the appropriate and best alternative. However, since these forms are the result of careful research, they frequently are used. Two copies of the Form Book (contained in the black looseleaf notebook with the Manual) are submitted with this report.

II. Evaluation

Section IV of the Small Business Clinic Grant Proposal, dated July 29, 1980, set out the proposed statement of work and objectives of the Clinic over the grant period. Each of the components of the proposed statement of work will be evaluated below by measuring the actual accomplishments of the Clinic against the proposed objectives.

A. The Clinic proposed to "provide students interested in Business Law a program which will expose them to the practical and substantive problems of counseling small businesses."

As outlined in Sections I, B and C of this Final Report, this objective was fully and satisfactorily accomplished.

B. The Clinic proposed to "provide legal advice to those members of the District of Columbia small business community selected by the supervising attorney."

Although the Clinic could not provide legal advice to every client who called (see Section I, D of this Final Report), students did provide one thousand three hundred and fifty-one hours of legal counseling to approximately one hundred and thirty-three clients. Conservatively estimated at a rate of thirty dollars per hour (and not counting the twenty hours per week spent by the supervising attorney), this would represent the equivalent of forty thousand five hundred and thirty dollars in legal services to clients. Since most clients served by the Clinic could not otherwise afford legal services, the Clinic views itself as having provided a direct community service in rendering these legal services without undue infringement on the private bar.
C. The Clinic proposed to "develop raw data on the precise nature of the legal problems faced by small businesses and how those problems might best be dealt with."

The data developed by the Clinic was based solely on the legal problems of the clients who were assisted. Those clients most often came to the Clinic in response to public service announcements indicating the Clinic provided free legal advice. Consequently, it is doubtful whether Clinic clients represented a true cross-section of the small business community, since successful small businesses generally retain private counsel. With that caveat, the Clinic did develop data on the types of legal problems or questions faced by its clients, which data appears in Section 1, D of this Final Report. The Clinic found that clients' problems and questions were best dealt with in a one-on-one counseling relationship, which relationship was directly monitored and supervised by the supervising attorney.

D. The Contractor proposed to "analyze the data and make recommendations regarding the nature of the legal problems that are of greatest concern to the small business community."

The data developed by the Clinic (see Section 1, D of this Final Report) indicates that questions involving the proper choice of organizational form and help drafting organizational documents are the primary concerns of the group of small business clients that are assisted by the Clinic.

E. The Contractor proposed to "develop a set of teaching materials to be used by the participants in the clinic and their instructors. These materials will, to the greatest extent possible, be designed so as to be transferable to use in similar programs at other law schools throughout the country."

As indicated in Section 1, E of this Final Report, five types of materials were developed by the Clinic. These were: a library; research and form files; a statute book; a manual; and a form book. Although not all of these would be directly transferable to small business clinics located elsewhere in the country, since they were developed specifically for the
District of Columbia, they certainly could serve as model materials for other clinics.

F. Finally, the Contractor proposed to perform certain specific tasks, which were:

1. To provide specified Clinic supervision.
   
   This task was fully performed, as detailed in Sections I, A and C of this Final Report.

2. To render monthly reports on the disposition of cases and monthly individual case reports.
   
   Such reports were submitted for each 30-day period to the Small Business Administration.

3. To develop a model program for small business clinics.
   
   This task was fully performed, as detailed in Section I, E and II, E of this Final Report.

4. To deliver a final report to the Small Business Administration.
   
   The delivery of this Final Report completes the final task of the grant proposal.

Submitted by:

Russell B. Stevenson, Jr.  
Oct. 1, 1981

Lela P. Love  