1972

An Investigation of the Association Between Level of Need for Power and the Career Preference of College Juniors and Seniors at Louisiana State University.

Virginia Swann Hill
Louisiana State University and Agricultural & Mechanical College

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AN INVESTIGATION OF THE ASSOCIATION BETWEEN LEVEL OF NEED FOR POWER AND THE CAREER PREFERENCE OF COLLEGE JUNIORS AND SENIORS AT LOUISIANA STATE UNIVERSITY

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Management

by Virginia S. Hill
B.S., University of Southern Mississippi, 1967
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ABSTRACT

In general, researchers dealing with understanding organizational motivation have been concerned with the primary and psychological needs. Little is known about the behavioral patterns of men with relatively strong constant motives. This investigation of career preference was designed to test David C. McClelland's theories of behavior by means of the following hypotheses:

Hypothesis One: College juniors and seniors who prefer careers in private enterprise have significantly higher levels of need for power than those who prefer a career in public enterprise.

Hypothesis Two: College juniors and seniors who prefer careers in small- and medium-size organizations have significantly higher levels of need for power than those who prefer large- and giant-size organizations.

Hypothesis Three: College juniors and seniors who prefer careers in private enterprise have more favorable attitudes toward certain aspects of the business organization believed to influence the power motive than those who prefer careers in public enterprise.

A sample of 337 students in business administration and engineering at Louisiana State University participated in the study. Data were collected by means of a questionnaire designed to classify career preference, a thematic apperception test based on the projection of the subjects' need for power, and a semantic differential test.
intended to measure the values and meanings of the power aspects of a 
business career.

The level of need for power was defined by dividing the fre­
quency distribution at the median for the sample. Classifications of 
high and low levels of need for power were used in tests of the three 
hypotheses.

Classifications for the test of the first hypothesis were high 
and low levels of need for power and private and public enterprise. 
The chi-square test of independence indicated that there were no sig­
nificant differences in career preference associated with level of need 
for power at the decision level of .05. Subjects who preferred a 
career in private enterprise did not have significantly higher levels 
of need for power than subjects who preferred a career in public 
enterprise.

Because McClelland's theory had predicted a preference for 
ownership among men with a high level of need for power an analysis of 
the behavior of the two levels of the power motive toward preference 
for ownership and preference for a business corporation was made. The 
results were not statistically significant. Moreover, analyses of the 
academic sub-groups did not substantiate the behavioral theory.

Another theoretical characteristic of the power motive was 
that men with a high level of need for power would avoid a career in 
a large bureaucratic organization. Therefore, the second hypothesis 
tested the independence of classification of high and low levels of 
power and small and large organizations. Chi-square analysis indicated 
no association between level of need for power and size of organization.
Thus, the hypothesis as stated was not confirmed. In addition, the hypothesis was not supported by analyses of the academic groups.

The third hypothesis was tested by an analysis of variance using a factorial design in which attitudes were compared for the effect of each variable, type, power, and size. This experimental design also permitted interpretation of the interaction among the variables.

Results of the test between private and public enterprise groups did not indicate any significant differences in attitudes at the .05 level of significance. Therefore, the third hypothesis was not supported. Significant differences were obtained when power and size were tested, but the interaction pattern indicated that the power aspects of the business organization were not the issue in attitude differences.

The analyses indicated that there were other issues or variables which influenced attitudes toward the business organization and career preference.
CHAPTER I

INTRODUCTION TO THE STUDY

BACKGROUND OF THE PROBLEM

The subject of motivation occupies such a central place in management thought that it has been said "management is motivation."\(^1\) Basically, the motivational process is designed to satisfy the primary and psychological needs of the individual;\(^2\) however, the effectiveness of this approach has certain limitations. One limitation is that there is a tendency to concentrate on day-to-day problems of individual need satisfaction rather than the long-range goal of a viable organization.

The fact is that there are two aspects of the motivation problem: (1) the individual goal and (2) the behavioral requirements of the organization. Each of these must be analyzed so that the efforts of the manager to motivate employees are consistent with the behavior required by the organization.

Analytical Framework for Motivation

Individual motivation is described in terms of motives and


attitudes toward a goal. These two factors are closely related because together they influence the way a person interprets a situation. As a result of this interaction, the individual selects a course of behavior that satisfies his need from a range of possible alternatives.

Motivation, therefore, is consciously directed behavior. When motivation is weak, the individual is said to be apathetic; when motivation is intense, it dominates behavior. Thus, the degree of motivation toward a goal may vary in strength and intensity.

This complex procedure of individual motivation can be shown schematically as follows:

Heredity
Experience
Environment

Figure 1
Motivational Process of the Individual

As shown in Figure 1, the unique character of the individual is formed by his heredity, experience, and environment. He has learned through his past experiences the situations that are satisfactory to him. In brief, his perceptions provide a framework within which he evaluates alternative modes of behavior.

Even though this complicated process is understood by the

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manager, he finds it difficult to use successfully in motivating employees. There are two reasons for this problem. First, recognition of the particular need is a matter of subjective analysis on the part of the manager. Second, objectives of the organization may require a degree of motivation which is beyond the capability of the individual. An analysis of the organizational behavioral requirements will explain this last point.

According to Daniel Katz and Robert L. Kahn, there are at least three behavioral requirements in the organization.¹

![Organizational Behavioral Requirements Diagram](image)

**Figure 2**
Behavioral Requirements of the Organization

The requirements in Figure 2 are (1) to join and remain in the organization, (2) to maintain dependable role performance, and (3) to innovate and create beyond the role requirements so that the system may be improved. Economic necessity may determine the motivation of the individual to join the organization and to maintain dependable role

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performance. However, there is still the problem of motivation to remain and to innovate and improve the system. This requirement stresses the intensity or strength of motivation. Individuals who have more intense needs to perform activities will be capable of greater motivation. As a consequence, the organization is interested in securing individuals with sufficiently strong motives so that the capability of higher levels of motivation is possible.

This particular aspect of motivation appears to have been overshadowed by the theories of psychological needs in much of the literature. Identification and measurement of a strong dominant motive has received little attention. An exception to this general statement is the research conducted by David C. McClelland and John W. Atkinson.7

McClelland's Model of Motivation

McClelland's general theory of motivation is a hedonistic theory which explains man's behavior in terms of activity directed toward goals that give him pleasure and toward avoidance of those that give him pain.8 The two innate motives--pleasure and pain—are the primary emotional needs, but the tendency to approach goals that arouse positive or negative emotional reactions to pleasure or pain is learned.


Atkinson clarified the meaning of the model by identifying four factors which should be considered in the study of motivation:

1. the conscious experience of desire or want;
2. analysis of behavior directed towards potential satisfactions and away from potential dissatisfactions;
3. internal and external conditions that influence appetitive and averse behavior;
4. individual differences in motivation.

From the learned expectations of McClelland's model the individual develops a motivation pattern described as "a sequence of behavior characterized by relative constancy of motivation." Thus, a distinctive pattern becomes associated with a consistent manner of behavior in the social environment.

However, individual differences associated with these motivation patterns are found in the strength of the motive. Atkinson believes that persistence toward a goal is greater the stronger the tendency to perform an activity. Therefore, individuals who have higher levels of a constant motive are capable of greater motivation than those who have lower levels of need.

McClelland, Atkinson, and their associates have developed a standardized technique for the analysis and measurement of motivation

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patterns. The advantage of this technique is that it can be used to conduct research concerning the behavior of individuals with strong needs or desires and also the relationship of that behavior with the economic environment.

STATEMENT OF THE PROBLEM

The problem of securing employees who are capable of greater levels of motivation can be made easier by identifying a particular motivation pattern and estimating its strength. In effect, a motivation pattern determines the way a person approaches his job so this knowledge can be used to predict the characteristic behavior associated with the motive.

Much of the research of McClelland and Atkinson has been in the area of the achievement motivation pattern. However, after a study of the general area, it appears that the need for power may be of more value in recognizing and developing men for managerial positions. In order to investigate this possibility further, the characteristics associated with the power motive must be examined.

The Power Motive

Certain motives appear to be a relatively stable characteristic of the personality. Alfred Adler postulated that the greatest motivation is the striving for power because of the generalized attitude of

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13 Ibid., p. 435.
dependency of children.\textsuperscript{14} Confronted by numerous obstacles and frustrations, the individual seeks to influence or control these aspects of his environment which affect his own actions. As a consequence of this early learning, the individual may develop a desire for superiority.\textsuperscript{15}

The power motive is considered to be a dimension of human relationships in this analysis. Primarily, emphasis is placed on a means of influence within the social environment. Definitions of the motive reflect this fact. Veroff defines the power motive as a "disposition directing behavior toward satisfactions contingent upon the control of the means of influencing another person(s)."\textsuperscript{16} Winter defines the motive as satisfaction derived from "influence over another person, group of persons, or the world at large."\textsuperscript{17} Another definition sees power as "the motive determined by external stimuli from situations characterized as competition for leadership, dominance, or influence."\textsuperscript{18} In view of these definitions, satisfaction of the need for power is


\textsuperscript{15}McClelland, \textit{The Achieving Society}, p. 323.


\textsuperscript{17}David G. Winter, "A Revised Scoring System for the Need for Power (N Power)" (Cambridge, Massachusetts: David G. Winter, 1968).

obtained through determining the behavior of others.

Behavior in organization is structured through decision-making activities. As a result, managerial positions are established so that the efforts of personnel may be influenced to accomplish the legal requirements of the organization. Behavior is directed toward the enterprise goals. In effect, the satisfaction associated with the power motive may determine the interest of the individual in performance of the managerial duties. For example, research has indicated that those individuals with a high need for power, when compared to those with a low need for power, have a greater interest in the job satisfaction of being a leader. The preceding idea suggests a positive relationship between the power motive and the satisfaction derived from attaining a position of influence or authority in the organization.

Unfortunately, the word "power" has the connotative meaning of force to many people, and, as a result, the American businessman has avoided the issue of the need for power because of the authoritarian image it implies. Nevertheless, in a recent article, McClelland is reported as stating, "Since managers are primarily concerned with influencing others, it seems obvious that they should be characterized by a high need for power..." In brief, a sense of satisfaction

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19Veroff, loc. cit.
must accompany the exercise of control or influence in a managerial position. Otherwise, the individual may lose his motivation to advance within the organization. For this reason, the intensity of the power motive is an important factor in the selection of potential managers because the individual's persistence in the competitive struggle for a managerial position is a function of the strength of the motive.  

**Competent Managers--A Scarce Resource**

The complexity of technology and the increasing size of organizations place a critical burden on colleges and universities to supply future executives. Education and special training are necessary requirements in the advancement of personnel to leadership positions.

Recently a number of articles have appeared in magazines and professional journals commenting on the alleged antipathy of college youth toward a career in the nation's corporations. One corporate executive has concluded that the primary reason for the difficulties in obtaining college youth in his organization is their "lack of interest." Lack of motivation is a serious matter in the

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22 Livingston asserts in his article that those individuals who lack a strong need for power devote their energies to other activities which they consider more satisfactory to them.


development of corporate managers. One possible explanation may be that the organization's expectation of the behavior of executive potential is not compatible with the personality of those students who have the desire to manage. Students may evaluate a career preference in terms of the satisfaction derived from participation in a certain type and size of organization.

Association Between Personality and Career Preference

McClelland's research in *The Achieving Society* concerned the association of a central dimension of the personality with the economic development in several countries, the United States, Italy, Turkey, and Poland. Among managers who were tested in the United States, the need for power was significantly higher among the men in the private sector. He concludes that in government or in large bureaucratic organizations, the man with a high need for power "who wants to impose his will, not be imposed upon, migrates to other employment."25 This theory seems to represent a logical viewpoint but the supporting data are not conclusive. In addition, McClelland's research did not include the motives of college students for career preference.

As a result of the above mentioned criticism concerning lack of enthusiasm for a business career, McClelland's theory becomes an important area for research. For example, assuming availability of employment in either the public or private sector, do individuals with higher needs for power prefer a career in the private sector?

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Specifically, the first hypothesis is:

**Hypothesis 1:** College juniors and seniors who prefer careers in private enterprise have significantly higher levels of need for power than those who prefer a career in public enterprise.

This hypothesis is intended to test the association between career preference and the need for power in order to determine whether a strong motivation pattern has an influence on the preference for a career in a particular type of enterprise. However, the investigation is not complete at this point.

The second part of McClelland's theory stated that the need for power may cause individuals to migrate from large bureaucratic organizations. While it is not universally true that large organizations are more likely to have bureaucratic tendencies than those of smaller size, there are several points that support this generalization. First, vested interests are more prevalent in large organizations because of their very size. Second, there is a wider range of activities to insure stability. Third, large organizations devote many resources toward maintaining communications, control, and coordination. These characteristics are more likely to create detailed procedures, rules, and regulations and to lead to centralized control so that size of organization has become an issue in the management literature.

Dissatisfaction of youth with the large organization has

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received a great deal of publicity.\textsuperscript{27} A recent poll conducted by Louis Harris & Associates and reported in \textit{Life} magazine\textsuperscript{28} showed the preferences of college students for career goals were listed as follows:

<table>
<thead>
<tr>
<th>Preference</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Company</td>
<td>23%</td>
</tr>
<tr>
<td>&quot;Small&quot;</td>
<td>33</td>
</tr>
<tr>
<td>For Yourself</td>
<td>38</td>
</tr>
<tr>
<td>*</td>
<td>94%*</td>
</tr>
</tbody>
</table>

*Those answering "Not sure" were dropped.

Only 23 per cent preferred the category of "big companies," but 71 per cent preferred smaller organizations.

The preceding data suggest that McClelland's theory warrants further research. The level of need for power may be associated with the preference for size of organization. Therefore, the second hypothesis is:

\textbf{Hypothesis 2:} College juniors and seniors who prefer careers in small- or medium-size organizations have higher levels of need for power than those who prefer careers in large- or giant-size organizations.

This hypothesis proposes to discover an association between level of need for power and the size of organization as measured by


\textsuperscript{28}Changes, Yes--Upheaval, No," \textit{Life}, LXX (January 8, 1971), pp. 22-27. The Harris poll was conducted nationally of a cross-section of 26 million Americans between the ages of 15-21. The table in the text represents only those in college.
number of employees. Do students who have a higher level of need for power feel that they are restricted by the routine procedures which they may believe to be in the larger organizations? The question here is not what bureaucratic tendencies are present but what students believe are present.

Previously individual motives were shown to interact with attitudes in the evaluation of alternative behavior patterns. The fact is that attitudes are considered a major part of determining response patterns. "Psychologists have used the measurement of attitudes as a device both for making inferences concerning motives and as predictors of behavior."²⁹ Logically, attitudes toward certain concepts in the organization may be investigated in an effort to explain the preferences exercised by the students when type and size are factors. Therefore, the third hypothesis is:

Hypothesis 3: College juniors and seniors who prefer careers in private enterprise have more favorable attitudes toward certain aspects of the business organization believed to influence the power motive than those who prefer careers in public enterprise.

The rationale of this hypothesis is that those who prefer private enterprise may believe that the concepts which are tested are more relevant in the private sector than in the public sector. Therefore, attitudes would be more favorable for those preferring the private sector.

IMPORTANCE OF STUDY

This study is of value for several reasons. First, the association of motivational patterns and career aspirations of college students are crucial issues to all organizations because it provides insight into the kind of men who are available for executive positions. Second, additional knowledge will be provided about the behavior of students when they are faced with alternative choices. Third, the information will be of value in the placement of potential managers and in planning the development of executives.

If the first and second hypotheses are supported, there will be evidence that individuals with a higher level of power motivation have a tendency to prefer a certain type and size of enterprise. Executive programs can be planned to improve managerial ability in areas in which those who have a need for power are weak. In addition, these men can be placed in positions which will take advantage of their potential constant motivation.

If the hypotheses are not supported, there will be a contribution to the description of the type of student entering different types and sizes of organizations, and an indication of the direction further research should take.

Regardless of the outcome of the third hypothesis, knowledge of attitudes and beliefs of the students will provide a communication link among private enterprise, public enterprise, and the academic

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community. If the first two hypotheses are supported and the third is supported, this information should indicate that student attitudes are a potent factor in choosing alternatives. If the first two hypotheses are not supported, the third hypothesis can improve the communication between organizations and students who are just entering a career. If the third hypothesis is not supported, private enterprise organizations will have some idea of their image among students. If the third hypothesis is supported, private enterprise will know that these concepts are important to students even though the level of need for power may not be the controlling factor in career preference.

Finally, the academic community will gain additional information on the concepts of power positions in the organization. The information may enable the community to undertake additional research in the field of motivation.

SCOPE OF THE STUDY

The study is concentrated on one motivation pattern and its relation to the career preference of college students. It is conceded that there may be other dimensions and factors, internal and external, which may have an effect on the students' preferences. However, it is also true that an attempt to investigate the whole range of variables which contribute to human behavior would be overwhelming. An attempt is made here to explore some generalizations concerning the power motive to determine whether they are evident in the real world.

Nagel in writing of methods of analyses stresses the point that no theory can explain a system unless various restrictive or
boundary conditions are placed on the generality of the theory.\textsuperscript{31}

**LIMITATIONS**

Studies of the kind explored here have certain limitations which are general in nature. First, adequate time and financial resources limit the scope of the study. Second, the participation of subjects in the research is limited.

A more comprehensive study of several universities in regions across the country would have given the research a more general application to the student population. However, such an inquiry would have required many months of travel at great expense. Therefore, the research was conducted at a state university in order to obtain a sample that was considered to be generally representative of other state universities across the country.

The second limitation is of more importance in evaluating the research. A replication of the test to these same students after they have been employed for a year or two would improve the study. Such a procedure, however, would have presented many other problems. Students participate in personality research on a voluntary and anonymous basis. To do otherwise would be an invasion of the privacy of the individual. For this reason, there may be some objection on the part of participants in contributing information for a follow-up study.

In defense of research of the type conducted here, behavioral research in the real world seeks associations, descriptions of behavior, and relationships rather than cause and effect. Although limitations are a necessity in the study of such a complex subject as the individual motivation, each study adds to the sum of knowledge and provides additional insight in the area of human behavior.

PREVIEW

This study is designed to explore the association between a dominant pattern of motivation and the behavior of students in the real world. These students will one day shape the future of the economy, and the results of the research will provide a better description and understanding of the motives and attitudes which influence their behavior.

Chapter II is a presentation of the methodology used to obtain the data upon which the conclusions and recommendations are based. A knowledge of the methods used to collect the data, procedures used in the analysis, and the limitations of the research provide a perspective for the evaluation of the results of the study.

Chapter III is an analysis of the data providing a test of the association between the levels of need for power and preference for careers in private or public enterprise. The analysis is expanded to include the association of level of need for power and ownership of business.

Organizational size and the level of need for power is analyzed in Chapter IV to establish a relationship between the two. The analysis includes a division of small and large organizations into
four categories based on number of employees to examine the relationship to need for power.

Chapter V presents an analysis of attitudes concerning certain aspects of the business organization which are believed to be related to the power motive. The analysis attempts to explain the results of the data analyzed in Chapters III and IV.

Chapter VI presents a summary of the findings and the conclusions and recommendations indicated by the results of the study.
CHAPTER II

METHODOLOGY OF THE STUDY

All too often in the study of human behavior the methodology used in the research is overlooked in transferring generalizations from one environment to another. It is the purpose of this chapter to set forth the specific methodology followed to gather and analyze the data. The research is necessarily conducted under certain restraints and limitations which should be duly noted before attempting to apply the findings to other situations. The subjects, the environment, and the methods and procedures used are all important to an intelligent evaluation of the conclusions and recommendations derived from the research.

SELECTION OF THE SUBJECTS

The basic assumption underlying the test of association between the power motive and career preference is the availability of employment in either the public or private sectors of the economy. Therefore, the subjects chosen are those who are in academic areas where employment in either sector is readily available and not limited in demand to a few jobs in a specific field.

General Population

The measuring instrument for the need for power is one which must be administered to groups because of the time involved. In order
to get groups of students together at any one time, it was necessary to obtain permission from professors to enter the classroom. For this reason, Louisiana State University at Baton Rouge was chosen for the research. It is a large state university, and the students at this institution are not considered significantly different from the students at other large state universities.

Academic Areas

A survey was conducted at Northwestern University of 191 large- or medium-size business organizations who recruit on college campuses. In 1970, approximately 85 per cent of the total undergraduates hired were in business administration or engineering.¹ The remaining 15 per cent was divided among liberal arts, chemistry, physics, and others. Private business appears to recruit employees in larger numbers in the areas of business administration and engineering. Furthermore, these students have degrees which are in demand in the public sector. In effect, the two academic areas which were selected seemed to fulfill the basic assumption of the study—employment was available in either the public or private sector of the economy.

For the purpose of this study, the business administration area includes management, marketing, finance, accounting, economics, and statistics. The engineering area includes chemical, electrical, petroleum, civil, and mechanical and industrial engineering. The

population in the two areas was treated as one with the number of subjects from each area being approximately equal.

**Academic Classifications**

This study is limited to students at the junior and senior levels. The survey cited above indicated that only nine per cent of the total number hired were graduate students so these were excluded from the sample.

Junior and senior classifications were selected because their general direction of interest has been established by this time. The classification was not limited to seniors because of the difficulty in securing subjects.

**The Sample**

A random sample was not possible because the nature of the research instrument required not only permission by the professor to enter the classroom but also the voluntary cooperation of the student.

For a degree of precision of five per cent, a sample size of 320 from the combined total of juniors and seniors in the two academic areas was considered to be the minimum. The actual size of the sample was 337 subjects.

**THE RESEARCH INSTRUMENT**

The research instrument is divided into three sections (see Appendix A). The first section provides the basis for classification of subjects by preference of career goal, the second section is a set of stimuli for the assessment of the need for power, and the third
section is designed to measure the attitudes of the subjects in the study.

The Questionnaire

The first section of the research instrument is a questionnaire designed to reveal the preferences of students for type and size of organization. Question No. 2 was included in the event any further study of the students is contemplated after two or three years' experience in the career. Question No. 4 was for the purpose of analyzing the academic areas separately. Question No. 5 served as a basis of classifying students by type of organization.

Question No. 6 categorized the subject's preferences for size of organization. Every subject responded to this question regardless of preference in question No. 5. Public enterprise is defined as a public service organization in this research study, and it was felt that subjects may very well have a preference for size in that category.

The Test for Need for Power

The second section of the research instrument is the Thematic Apperception Test (TAT) which consists of a series of ambiguous pictures that permit interpretation according to the individual's perception. The subject writes a story that fits the picture. The rationale behind the technique is that each story projects urges and needs of the subject that are consistent with his personality.
McClelland uses this particular procedure to reveal certain aspects of the personality through the thought content of the subject.\(^2\)

Three pictures were used as stimuli for the construction of stories by the subjects. The pictures, (Nos. 5, 92, and 94),\(^3\) were chosen from a catalogue of pictures and are identified as those used by Veroff in his development of the scoring method for power motivation.\(^4\) Veroff conducted a number of tests for the validity of the power motive and found that the projective test identified variables related to power. Based upon his research, it is assumed that the test identifies and measures the need for power in individuals who take the test under neutral conditions.

The scoring procedure used is a standard one developed by Veroff and modified by Winter.\(^5\) First, the story is scored for Power Imagery, and then goes on to search for subcategories which elaborate the basic power theme. The maximum score possible for one story is the sum of scores for Imagery and subcategories or +11. If Power Imagery is not present, the story is scored zero, and the scorer proceeds to the next story.


One objection to the projective technique has been the lack of objective method—the same data can be interpreted differently by different scorers. To insure more reliable data and consistent scoring method, the scoring was done at the Behavioral Science Center in Cambridge, Massachusetts, which is under the direction of David C. McClelland and associates.

**Measurement of Attitudes**

The third section of the research instrument is the semantic differential test developed by Charles E. Osgood and others to measure attitudes and meaning. This measurement was chosen because it appears that meaning to an individual is multidimensional. The semantic differential is designed to measure not only attitudes but to provide additional descriptive information about the meaning of the concept to the individual. Two individuals or two groups may have the same attitude toward a concept, but a difference in meaning may provide a better explanation of the preference expressed for a career.

The basic operation of the semantic differential is the allocation of a concept to a series of descriptive scales, polar adjectives, which are chosen as representative of the major dimensions of semantic

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space in which meaning varies. Through extensive research on the instrument, Osgood and his associates have identified three dimensions as major contributors to the meaning of a concept to the individual: evaluative, potency, and activity.

The attitudes are determined by the evaluative factor which accounts for the greatest portion of judgment in human thinking. This dimension compares favorably with such well-known scales as the Thurstone and Guttman scales as an index of attitude. Attitudes measured on this scale judge the concept as good--bad, etc. Intensity of the attitude is determined by its position on the scale—from 1 as a measurement of bad to 7 as a measurement of good. The neutral position is 4 with degrees of intensity of attitude between the polar adjectives.

Interpretation of meaning is enhanced by the potency factor. This factor is identified with the strength or toughness of the concept being judged. Connotative meaning is judged by such adjectives as strong--weak.

The third dimension of meaning is measured by the activity factor. This factor represents excitement or action. Such adjectives related to the meaning of the concept as fast--slow are representative of the activity dimension. The other dimensions of meaning account for

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9 Ibid., p. 31.
10 Ibid., p. 190.
11 Ibid., pp. 193-195.
a very minor portion of the semantic space\textsuperscript{12} and add little to the interpretation.

Preparation of the semantic differential test requires selective judgment. Three factors must be considered in this process: the selection of the concept, selection of the scales, and the form of the test.

\textbf{Selection of Concepts}.--The concepts selected depend upon the purposes of the research.\textsuperscript{13} They should be relevant to the subject matter and familiar to the individuals being tested. The concepts tested in this study were chosen as certain aspects of the organization believed to influence the power motive. Therefore, selection of the concepts were judged by the following criteria:

1. the need to control or influence others or the world at large;

2. the desire for superiority and prestige.

The concepts were derived from an article in the Harvard Business Review\textsuperscript{14} which implied that both public and private organizations must be prepared to change in structure and values to meet the demands of young people when they enter a career. The crux of the demands was power--the power to make decisions, to set objectives, to initiate

\begin{itemize}
\item \textsuperscript{12}Ibid., p. 73.
\item \textsuperscript{13}Ibid., pp. 77-78.
\end{itemize}
change—and the desire for autonomy. These issues are directly related to the power positions within the organization.15

The third hypothesis seeks an explanation for the behavior revealed by the relationship between the level of need for power and career preference. Therefore, the concepts which were considered appropriate for the investigation were the following:


C-2. Opportunity Provided by Business Career To Influence Other People in the Organization.


C-5. Opportunity Provided by Business Career To Use Your Abilities.

C-6. Your Chance To Attain a Position of Prestige in Business.

All concepts were associated with a business career to provide a point of comparison for the public and private enterprise groups.

Selection of Scales.---Scales were chosen on the basis of being

maximally loaded on the specific factor represented and minimally loaded on others. The scales chosen were tested by Osgood and recommended as being representative of the dimension in space.\textsuperscript{16}

All scales maximally loaded on a particular dimension may not be applicable to a certain concept because the nature of the concept dictates the relevancy of the scale. Irrelevant concept-scale pairings may cause a reduction of information if the scores are averaged over each dimension of meaning. This problem is avoided by comparison of groups across each scale. If the scale is considered irrelevant by the entire sample, the neutral position is marked, and the scale is of no consequence in the comparisons.

Customary procedure is the use of three scales to represent each factor so that the subject is provided with a balanced space. In this manner, the subject has a greater choice to describe his attitude and the meaning he attaches to the concept.\textsuperscript{17}

The scales chosen for this particular set of concepts were:

<table>
<thead>
<tr>
<th>Evaluative</th>
<th>Potency</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>good-bad</td>
<td>strong-weak</td>
<td>active-passive</td>
</tr>
<tr>
<td>fair-unfair</td>
<td>large-small</td>
<td>sharp-dull</td>
</tr>
<tr>
<td>pleasant-unpleasant</td>
<td>wide-narrow</td>
<td>fast-slow</td>
</tr>
</tbody>
</table>

\textbf{Form of the Test.}--The form chosen for administering the test

\textsuperscript{16}Osgood, \textit{op. cit.}, p. 37.

\textsuperscript{17}\textit{Ibid.}, pp. 78-79.
was one concept on a separate sheet of paper. This was done so that there would be a constant meaning for the subjects in the concept being judged. The scales are alternated in polarity direction, to prevent position preference, and the factors are rotated. However, once the form was selected it was used for all concepts.

Pretest of the Instrument

The research instrument was pretested at the University of Southern Mississippi by administering it to a group in a required course in business administration and to a group in a required course in education.

No attempt was made to measure power. The object here was to determine if the students could be stimulated by the picture to write meaningful stories.

The scales of the concepts were tested to determine if subjects who had made a definite commitment in either the public or private sector had different attitudes and/or meaning toward the concepts in a business career.

The criterion used was that if a significant difference was present on any one scale, the concept was considered differently by one group. The pretest showed that there were significant differences, particularly on the potency and activity factors.

The students were encouraged to write criticisms of the wording of the concept, and changes were made for the sake of clarity.

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Ibid., pp. 81-82.
METHOD OF ANALYSIS

The independent variable, the need for power, is a part of the personality and has already occurred in this study. The object here is to disentangle the existing situation and to study the possible relationship between the independent variable and other variables which are the subject of interest.\(^{19}\)

Analysis of the First and Second Hypotheses

The analyses of the first and second hypotheses deal with nominal dependent variables, namely, the type and size of organization preferred by the students. In using a nominal variable, the members of a group may be the same as or different from the members of another group.\(^{20}\) The result in this case is that there are dichotomous variables, private and public enterprise and large and small organizations.

The independent variable is an ordinal variable which ranks the members of the group.\(^{21}\) Because the data in this study are not exact in any numerical sense, but are, on the one hand, a dichotomy and, on the other, rankings of power, the chi-square test of independence was chosen as the method of statistical analyses.\(^{22}\)

\(^{19}\)F. N. Kerlinger, op. cit., pp. 360-365.


\(^{21}\)Ibid., p. 13.

Statistical Procedure.—Chi-square is a measure of the lack of agreement between the observed data and the hypothesis, which states that the classifications are independent and have no significant association. The formula for such a test is

\[ X^2 = \frac{(f_o - f_e)^2}{f_e} \]

where \( f_o \) are the observed frequencies and \( f_e \) are the expected frequencies.

Since the chi-square test is not a measure of the degree of relationship, the contingency coefficient is the descriptive measure of association used with qualitative variables. The contingency coefficient is given by

\[ C = \frac{X^2}{N + X^2} \]

The maximum value of the contingency coefficient is determined by the number of rows and columns in the contingency table. Thus, a 2 x 2 table may be compared only to another 2 x 2 table. However, in this study the contingency coefficient is adjusted by

\[ C_{\text{adjusted}} = \frac{C}{C_{\text{max}}} \]

where \( C_{\text{max}} \) equals the maximum value of the specific contingency table.\(^{23}\)

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This procedure standardizes the value of the contingency coefficient to one.

**Definition of Power.**—A definition of the level of need for power is consistent across all classifications. Classifications of high and low levels of need for power were obtained by dividing the entire sample at the median. This procedure was used in the interest of consistency and to avoid the confusion of changing definitions.

The frequency distribution shown in Figure 3 indicates that the scores have a tendency to cluster around the median score. For this reason, a more sensitive test was applied by dividing the distribution roughly into thirds. Sharp breaks occur at the scores of two and five, so the procedure in this instance was to divide the sample at the score of two and below for low level of power and at the score of five and above for high level of power.

**Definition of Enterprise Classification.**—Groups in public and private enterprise were classified based upon answers to question No. 5 in the questionnaire. All subjects who checked items (5-1), (5-2), and (5-6) were placed in the category of private business. These items include ownership of business, family business, and a business corporation. Subjects who checked the remaining items were classified as the public enterprise group. Included in this category were government service, teaching profession, armed forces, a charitable organization, and private foundations. In cases where the option other was checked, the students were classified in either category where an
Figure 3

Frequency Distribution for Need for Power

Median = 3.37   Mean = 3.58

Standard Deviation = 2.24
explanation was given. Where no explanation was given, the subject was not included in the sample.

**Further Analyses.** The same procedures and definitions are used throughout the testing of the first and second hypotheses. Tests are conducted by academic area, by ownership of business, and by subdividing small and large organizations into four groups characterized by number of employees.

**Analysis of the Third Hypothesis**

The third hypothesis attempts to explain the results of the previous tests--the preference of subjects. However, the hypothesis has added a qualification of the attitudes by relating them to aspects of the organization believed to influence the power motive. Furthermore, in the second hypothesis, size of organization and level of need for power are tested for association. A more complete analysis can be made by testing the effects of three independent variables on the attitudes of subjects.

Factorial analysis enables the research to proceed on several independent variables simultaneously. In addition, the effect of combinations of variables can be measured to determine significant differences. This procedure may provide more insight into the behavior of students on the basis of several cross-classifications.24

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The three factors in the study have two levels—private and public enterprise, high and low power, and small and large organizations. Methods of analysis of variance in factorial designs with equal or proportionate sub-class numbers are given in most standard textbooks. However, unequal or disproportionate sub-class numbers contribute to the failure of the addition theorem for the sums of squares. As a result of the complications associated with unequal frequencies, the method used here to conduct the analysis involving disproportionate sub-class numbers is one developed by the Agriculture Research Center. The procedure yields the same results as the standard methods used in computations of the analysis of variance.

The least-squares procedures (method of fitting constants or estimates of the population parameters) involves computing the sums of squares for the analysis of variance by the use of matrix algebra. A matrix inverse is used to compute estimates of the constants and to compute the sum of squares for the class or set under investigation.

An analysis is conducted on each scale. If the scale is significantly different when comparing groups, then the meaning of the concept is considered to be different. The interaction is analyzed to determine the form of variation for one factor over the levels of

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26 For complete information on the analysis and its many applications to data with unequal sub-class frequencies, see Walter R. Harvey, *Least Squares Analysis of Data with Unequal Subclass Numbers*, U.S. Dept. of Agriculture, Research Service No. 20-8 (Beltsville, Maryland: Biometrical Services, Agriculture Research Center, July, 1960).
another factor in order to determine the manner in which the factors interact to produce a significant difference in attitude.

The academic sub-groups are examined by profiles of the groups. The profiles show the different perceptions of groups within the business group and the engineering group.

The Level of Significance

The level of significance chosen for this study is 5 per cent. It is used throughout the study. This level seems sufficient since it means that if the null hypothesis is rejected, the computed statistic can be expected to occur in only 5 out of 100 samples.

LIMITATIONS OF THE RESEARCH

The need for power is a classification variable. It exists in the person before the research is begun. Therefore, the variable is not under the control of the researcher, and no experiment is involved. In defense of _ex post facto_ research, exploratory research in the real world adds information or modifies existing theories even though it is necessary to employ what Ferguson calls "a primitive approach."\(^{27}\) If the difficulties involved in the measurement of such variables are recognized and the purpose of the research is understood to involve an isolation of variables in an effort to discover relationships, then the evaluation can be made on a more intelligent basis. It is similar in nature to the relationship of price and quantity in economic theory.

\(^{27}\)Ferguson, _op. cit._, p. 13.
There are other variables which enter into price theory, but it increases understanding of economics if this basic relationship is known.

There are certain methodological problems in the Thematic Apperception Test which should be understood. First, the instrument may be effective for the first few pictures and after that subjects may adapt to the method. The test was shortened to three pictures instead of the usual six to allow for this limitation. The second problem is the familiarity of the pictures to the subjects in the study. Higher response appears to occur when the stimuli are situations with which the subjects can identify. It is, of course, difficult to find pictures that satisfy this condition when two groups of subjects are tested. The pictures selected were felt to be familiar to both business and engineering students.

The method of measuring the need for power, the projective test, is not considered reliable by some psychologists. One of the leading authorities in the field of psychological testing, however, has accepted the tests for the purpose of research. Further precautions were taken to insure the reliability in this study by having it scored by professionals.


CONCLUSION

The importance of the power motive is emphasized in the statement: "Perhaps the most generally valid statement that can be made about the nature of the accessory functions of groups is that all groups serve to meet the dominance needs of some of their members and the belongingness needs of most of their members."\(^{30}\) The preferences and attitudes associated with this motive appear to be of considerable importance to the management of public and private organizations.

CHAPTER III

THE POWER MOTIVE AND CAREER PREFERENCE
IN PUBLIC AND PRIVATE ENTERPRISE

INTRODUCTION

The purpose of the first hypothesis in this study is to investigate the association between the level of need for power and the preference for career goals of college students. David C. McClelland's theory was that the man with a high level of need for power who wants to impose his will, not be imposed upon, migrates from government to other employment.¹ Therefore, the hypothesis to be tested in this chapter is:

College juniors and seniors who prefer careers in private enterprise have significantly higher levels of need for power than those who prefer a career in public enterprise.

The analysis is further expanded to include the association of the level of need for power and ownership of business because of McClelland's theoretical reasoning that ownership is important to individuals with a high level of power.²

²Ibid.
ASSOCIATION OF LEVEL OF NEED FOR POWER AND TYPE OF ENTERPRISE

The purpose of this analysis is to isolate the level of need for power and career preference by type of enterprise, and to investigate the association between the two classifications. The method of analysis is the chi-square test of independence and its associated contingency coefficient. The null hypothesis to be tested is that there is no relationship; the two classifications are independent.

Analysis of Entire Sample

Subjects in the entire sample were divided into four groups. The need for power was defined as a dichotomy with high and low levels of need. Subjects whose scores were below the median were classified as low in the level of need for power. Subjects with scores above the median were classified as high in the level of need for power.

The type of enterprise was naturally a dichotomy. Subjects preferred either private enterprise defined as personal business, family business, and a business corporation or they preferred public enterprise defined as government, the armed forces, teaching profession, charitable organization, private foundation, and any public service organization. The latter distinction included several subjects who answered item No. 9 of question No. 5 by saying they preferred the Peace Corps, hospitals, and similar organizations.

Table 1 indicates the preferences of the students when classified according to these two categories. An overwhelming majority of students, 84.57 per cent, preferred the private sector to the public
sector. The subjects who indicated this preference were relatively equally divided between high and low levels of need for power. In addition, the division in level of need for power was approximately equal in the public sector.

**TABLE 1**

**INFLUENCE OF LEVEL OF NEED FOR POWER ON CAREER PREFERENCE FOR ENTIRE SAMPLE**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>135</td>
<td>25</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40.06</td>
<td>7.42</td>
<td>47.48</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>150</td>
<td>27</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td></td>
<td>44.51</td>
<td>8.01</td>
<td>52.52</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285</td>
<td>52</td>
<td>337</td>
<td></td>
</tr>
<tr>
<td></td>
<td>84.57</td>
<td>15.43</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

\[X^2 = 0.008853\]

\[.90 < p < .95\]

Analysis of the data in Table 1 indicated the classifications were independent, and no association was present between the level of need for power and the preference for public or private enterprise. The significance level in this analysis is between .90 and .95. In fact, such a small value of chi-square indicates almost perfect agreement between the observed frequencies and the expected frequencies. A further examination of the data was felt to be necessary as a precautionary measure.

The analysis may be clarified by converting high and low levels
of need for power to a common base for comparison. This procedure should provide a further check on the preceding analysis.

TABLE 2
PREFERENCE FOR TYPE OF ENTERPRISE BY STUDENTS CLASSIFIED AS HIGH AND LOW LEVEL OF POWER

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private Percentage</td>
<td>Public Percentage</td>
</tr>
<tr>
<td>High</td>
<td>84.37</td>
<td>15.63</td>
</tr>
<tr>
<td>Low</td>
<td>84.75</td>
<td>15.25</td>
</tr>
</tbody>
</table>

High and low level of need for power preferred private and public enterprise by the same proportions. The evidence in Table 2 shows that there was no significant influence of a higher level of need for power for career preference. In brief, the analysis lends support to the previous analysis that no statistically significant association existed between the two variables, levels of need for power and type of enterprise.

To probe more deeply into the matter, an analysis was made of the extremes of the distribution—very low power (defined as being 0 - 2, inclusive) and very high power (defined as being 5 - 11, inclusive). Table 3 indicates a level of significance between 50 and 70 per cent in this analysis.

Proportions of students who prefer private enterprise did not change substantially from the entire sample. There was a slight increase in the percentage of high level of power students who prefer
private enterprise, but the percentage preferring public enterprise showed little change. On the whole, the extreme portions of the distribution show an approximately equal division of high and low level of power students in each category. Therefore, the level of significance did not change sufficiently to show any association between the two classifications.

**TABLE 3**

**INFLUENCE OF EXTREME PORTIONS OF LEVEL OF NEED FOR POWER ON CAREER PREFERENCE FOR SAMPLE**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>93</td>
<td>41.90</td>
</tr>
<tr>
<td>Low</td>
<td>99</td>
<td>44.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192</td>
<td>86.50</td>
</tr>
</tbody>
</table>

\[ X^2 = 0.2488 \]
\[ 0.50 < p < 0.70 \]

The hypothesized relationship of a higher level of power and preference for private enterprise was not substantiated in these analyses. Subjects in the present study show a decided preference for private enterprise, but the data give no indication that the preference was influenced by level of the power motive.

McClelland developed his theory by means of the motivation
motivation is a multiplicative function of the motive, the expectancy or subjective probability of success, and the incentive value of success. Therefore, men with a high level of power would approach situations which satisfied their disposition to influence or control others or the world at large.

The research reported in McClelland's book, *The Achieving Society*, indicated that managers in private business had significantly higher levels of need for power when compared to managers in government departments. This result was particularly evident in the United States. Based on these findings, McClelland concluded that working for the government may require enough obedience to arbitrary dictates from above to make this type of employment unpleasant for men who have a high level of power.

According to the preceding theory, the subjects with a high level of need for power would perceive that the probability of imposing their will would be greater in private enterprise. Based on the evidence of this study, there is no support for this thesis.

Although, the hypothesis as stated was not supported, subjects did exhibit a preference for private enterprise. However, it appeared that the preference was influenced by other variables. The fact that approximately equal proportions of students having high and low levels of need for power preferred private enterprise supports this conclusion.

---


There is also the possibility that the difference in subjects led to some of the inconsistency of the test. McClelland's subjects were selected from middle level managers in private business and in government. Work experience in the competitive atmosphere of business may have activated the power motive of the subjects in his sample. Subjects in the present study are college students who are not involved in work situations which stimulate competition for managerial positions. This basic difference could have contributed to some of the inconsistency between McClelland's research and the present study.

The foregoing analyses were based on the entire sample. There may be systematic differences between students in the two academic areas which may obscure the relationship when students are considered as one sample. Therefore, a similar analysis was conducted within the classification of academic area.

**Analysis of Academic Groups**

Systematic differences could very well contribute to the cogency of the results of the first series of analyses. For example, the content of many courses in business administration may arouse the power motive. Courses such as business policy, personnel management, and principles of management deal with the positions of power in the organization and the superior-subordinate relationship. In engineering, the emphasis is placed on the technical and theoretical aspects of the profession. As a result of the different areas of interest, students in engineering, whatever their level of need for power, may view the public and private sectors as being equally attractive employment
opportunities. Business students may be more conscious of the fact that they cannot exert a great deal of influence over policies and objectives in the public sector.

**Analysis of Academic Area, Career Preference, and Level of Need for Power.**—The first analysis relating to the argument advanced above is an analysis of career preference in the academic groups. Table 4 indicates the percentage of the students who prefer private and public enterprise by academic area. In the business group, 82.0 per cent preferred private enterprise. The percentage of the engineering group was even higher—87 per cent preferred the private sector.

**TABLE 4**

EMPLOYMENT PREFERENCE OF ACADEMIC GROUPS BY TYPE OF ENTERPRISE

<table>
<thead>
<tr>
<th>Academic Area</th>
<th>Type of Enterprise</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Business</td>
<td>132</td>
<td>82.0</td>
<td>29</td>
<td>18.0</td>
<td>161</td>
</tr>
<tr>
<td>Engineering</td>
<td>153</td>
<td>87.0</td>
<td>23</td>
<td>13.0</td>
<td>176</td>
</tr>
</tbody>
</table>

Comparison of the employment preferences of students classified by academic area shows that there is little difference in preference for type from the preference expressed by the entire sample. However, the analysis indicated that a greater proportion of engineering students preferred private enterprise. For this reason, an analysis was made on the association of area of study and level of need for power.
The possibility existed that the different proportions in the groups might be related to a difference in the level of need for power.

Subjects were classified by level of need for power and by academic area. Table 5 contains the data which resulted when these classifications were analyzed. The engineering sample had a much larger proportion of low level of need for power. In the business area, the opposite was true—the proportion of high level of need for power was larger.

### TABLE 5

CONTINGENCY TABLE FOR SUBJECTS CLASSIFIED BY ACADEMIC AREA AND LEVEL OF NEED FOR POWER

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Academic Area</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business</td>
<td>Engineering</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Per-centange</td>
<td>Number</td>
<td>Per-centange</td>
<td>Number</td>
</tr>
<tr>
<td>High</td>
<td>85</td>
<td>25.22</td>
<td>75</td>
<td>22.26</td>
<td>160</td>
</tr>
<tr>
<td>Low</td>
<td>76</td>
<td>22.55</td>
<td>101</td>
<td>29.97</td>
<td>177</td>
</tr>
<tr>
<td>Totals</td>
<td>161</td>
<td>47.77</td>
<td>176</td>
<td>52.23</td>
<td>337</td>
</tr>
</tbody>
</table>

\[ x^2 = 3.4953 \]

\[ .05 < p < .10 \]

The data indicated that there was a difference in the proportions of high and low levels of need for power in the two groups although the level of significance was not high enough to reach the decision level of .05. The probability was between .05 and .10. In the category of high level of need for power, 53.12 per cent chose
business as an area of study. In the category of low level of need for power, approximately 57.06 per cent chose engineering as an academic area of study.

The data in these two tables, Tables 4 and 5, have a tendency to support the conclusion in the preceding section that other variables enter into preference for a career. The evidence that a greater proportion of engineering students prefer private enterprise despite the fact that there is a smaller proportion in that academic area who have a high level of need for power indicates to the researcher that the power motive had very little effect on their career preference.

The possibility exists, however, that an analysis of the separate groups may reveal a probability that there is an association within groups between level of need for power and career preference in private enterprise.

Analysis of the Business Administration Group.--The business students were classified according to the level of need for power in the same manner as the entire sample. The data which were used to conduct the chi-square analysis are shown in Table 6.

The analysis shows a level of significance between .30 and .50, which is not sufficient to indicate any association between level of need for power and career preference for business students.

In the previous analysis, a greater proportion of high level of need for power students were in business administration. If the theory of power motivation were valid for this group, a greater proportion of those students with a high level of need for power should prefer private
enterprise. On the contrary, a greater proportion of those students preferred public enterprise when compared to the entire sample. The proportions of high and low level of need for power in the private sector remained approximately the same. Thus, the level of need for power appears to have no association with the career preference for private enterprise of this sub-group.

**TABLE 6**

**INFLUENCE OF LEVEL OF NEED FOR POWER ON CAREER PREFERENCE FOR BUSINESS ADMINISTRATION STUDENTS**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>67</td>
<td>41.61</td>
<td>18</td>
<td>11.18</td>
<td>85</td>
<td>52.79</td>
</tr>
<tr>
<td>Low</td>
<td>65</td>
<td>40.37</td>
<td>11</td>
<td>6.84</td>
<td>76</td>
<td>47.21</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>81.98</td>
<td>29</td>
<td>18.02</td>
<td>161</td>
<td>100.00</td>
</tr>
</tbody>
</table>

\[ X^2 = 1.2207 \]

\[ 0.30 < p < .50 \]

A further analysis was made using the extreme portions of the sample of business students. Low level of need for power was defined as scores 2 through 0, and high level of need for power was defined as scores 5 through 11 for this analysis. The results are shown in Table 7.

When the extremes of the distribution were analyzed, the proportion of students with high level of need for power increased.
approximately 5 per cent in the private sector. Nevertheless, the level of significance was between .20 and .25 which still does not approach the decision criterion of .05. Therefore, the difference between the extreme portions of the sample of business students was not substantial enough to be statistically significant.

TABLE 7

INFLUENCE OF THE EXTREME LEVELS OF NEED FOR POWER ON CAREER PREFERENCE FOR BUSINESS STUDENTS

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Per-</td>
<td>Number</td>
<td>Per-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>centage</td>
<td></td>
<td>centage</td>
</tr>
<tr>
<td>High</td>
<td>51</td>
<td>46.79</td>
<td>12</td>
<td>11.00</td>
</tr>
<tr>
<td>Low</td>
<td>41</td>
<td>37.62</td>
<td>5</td>
<td>4.58</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>84.41</td>
<td>17</td>
<td>15.59</td>
</tr>
</tbody>
</table>

\[X^2 = 1.3508\]
\[0.20 < p < 0.25\]

When the employment preference was analyzed by academic area, the proportion of engineering students who preferred private enterprise was 87 per cent. Therefore, the data for students were examined to determine whether a relationship existed in this sub-group.

**Analysis of the Engineering Group.** The engineering group was divided into high and low levels of need for power and analyzed by enterprise preference.
A chi-square analysis of Table 8 shows the probability of an association between the power motive and type of enterprise was between .20 and .25. The proportionate division of students in private enterprise shows a much larger proportion of low level of need for power. A similar proportionate division exists in the public enterprise classification.

**TABLE 8**

**INFLUENCE OF LEVEL OF NEED FOR POWER ON CAREER PREFERENCE FOR ENGINEERING STUDENTS**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>68</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>38.63</td>
<td>3.98</td>
</tr>
<tr>
<td>Low</td>
<td>85</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>48.30</td>
<td>9.09</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>86.93</td>
<td>13.07</td>
</tr>
</tbody>
</table>

\[ X^2 = 1.6047 \]

\[ 0.20 < p < 0.25 \]

An analysis was conducted using the extreme portions of the distribution in the sample of engineering students.

The proportions show little change from the preceding analysis. Probability of chi-square is between .30 and .50, which is a lower level of significance than the level for the engineering sample as a whole. However, the proportion of the extremes of the distribution who preferred private enterprise is 88.48 per cent. This percentage is
greater by far than that in any of the other analyses.

TABLE 9
INFLUENCE OF EXTREME LEVELS OF NEED FOR POWER ON CAREER PREFERENCE FOR ENGINEERING STUDENTS

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>Public</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>42</td>
<td>37.16</td>
<td>4</td>
<td>3.54</td>
</tr>
<tr>
<td>Low</td>
<td>58</td>
<td>51.32</td>
<td>9</td>
<td>7.98</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>88.48</td>
<td>13</td>
<td>11.52</td>
</tr>
</tbody>
</table>

\[ X^2 = 0.6011 \]
\[ 0.30 < p < 0.50 \]

It will be recalled that McClelland's theory indicated that a career preference would be made on the basis of satisfaction of a disposition to impose the individual's will or influence. Since the need for power had no association with career preference, it would appear that the students would perceive no difference in types of enterprise. Thus, either type would seem to be equally attractive as employment areas. However, this is clearly not the case when the proportion who prefer private enterprise is observed.

Based on these analyses, it appears that the hypothesis as stated was not supported when the academic areas were examined. Although proportionately the preference for private enterprise was very great, the level of need for power appeared to play no part in the stated preference.
An analysis of the private enterprise group may prove to be more productive in testing for a relationship between level of need for power and career preference. This sector attracted such large proportions of students in both academic areas that a separate analysis appears plausible.

ASSOCIATION OF LEVEL OF NEED FOR POWER AND OWNERSHIP OF BUSINESS

McClelland reasoned, with some justification, that private ownership would be crucial for men with a high level of need for power because it "implies the power of disposal of what is owned." A high level of need for power may also imply a desire to become an entrepreneur in private enterprise.

Entrepreneurial Responsibilities and Ownership of Business

The traditional image of the American entrepreneur has been the individual who chooses to take the risks associated with ownership. Ambition, ability to organize, a certain amount of daring, and a sense of individual responsibility for productive labor are those characteristics which are most often mentioned in a definition of entrepreneurship. These characteristics compare favorably with the image given by the need for power—the disposition to influence others and the world.

5Ibid., pp. 265, 296.

at large, the desire to occupy a position of authority and prestige.

Apparently the desire to take the risks of ownership is still active in the general student population. The Harris poll in *Life* magazine reported that 38 per cent of the college students in the study preferred their own businesses. McClelland's theory that the power motive might be associated with this desire seemed worthy of investigation.

**Analysis of Personal Business Versus Business Corporations**

Analysis of the association between the level of need for power and ownership of business required limiting this sample to private enterprise. High and low levels of need for power were defined by determining the median for private enterprise (3.43). All students who had scores below the median were classified as low level of need for power. All those who had scores above the median were classified as high level of need for power.

The questionnaire section of the research instrument had provided numerous choices of career preference. Students were asked to check their preference in order to give them an opportunity to express their desire although they might expect to work for a business corporation. As a matter of fact, some of the students did indicate personal business as a first choice and a business corporation as their second choice. When the option was expressed in this manner, the subject was

---

classified as the personal business group.

When subjects were classified in the four groups, the data were analyzed by the chi-square statistical procedure. Probability of an association between level of need for power and preference for type of private business was between .30 and .50 which was not statistically significant.

Proportions of students in the high and low level of need for power classifications were approximately equal in personal business and business corporations as shown in Table 10. Thus, there seemed to be no indication that the power motive influenced preference for type of private business.

### TABLE 10

**INFLUENCE OF LEVEL OF NEED FOR POWER ON CAREER PREFERENCE FOR PERSONAL BUSINESS AND BUSINESS CORPORATIONS**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Private Business</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal Business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>22</td>
<td>8.24</td>
<td>106</td>
<td>39.70</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
<td>10.86</td>
<td>110</td>
<td>41.20</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>19.10</td>
<td>216</td>
<td>80.90</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.5827 \]

0.30 < p < 0.50

However, there was still the possibility that a combination of personal business and family business might show some relationship.
Analysis of Personal Business and Family Business versus Business Corporations

A combination of the two categories of personal business and family business increased the total percentage of those who expressed a preference for ownership from 19.10 per cent to 24.21 per cent. A comparison with the proportion in the Harris poll (38 per cent) does not indicate that this sample had a strong desire for ownership. As the proportions in Table 11 point out, high and low levels of need for power who preferred the types of private enterprise were approximately equal.

### TABLE 11

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Private Business</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal and Family</td>
<td>Business Corporations</td>
<td>Total</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>29</td>
<td>10.17</td>
<td>106</td>
<td>37.19</td>
<td>135</td>
<td>47.36</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>40</td>
<td>14.04</td>
<td>110</td>
<td>38.60</td>
<td>150</td>
<td>52.64</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>24.21</td>
<td>216</td>
<td>75.79</td>
<td>285</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

\[ X^2 = 1.0411 \]
\[ 0.30 < p < 0.50 \]

Chi-square analysis shows a level of significance between .30 and .50. The decision criterion for a statistical significance was .05.
Analysis of the subjects by academic area showed that although the proportion of business students who preferred the combination of personal business and family business increased to 31.82 per cent, the division by level of need for power in the types of private business was still approximately equal. The engineering group showed a similar division between levels of need for power. However, in this group, the proportion favoring personal and family business dropped to 17.65 per cent (See Appendix B). The level of significance for both academic groups in a chi-square analysis was between .30 and .50.

These analyses did not support McClelland's thesis that individuals with a high level of need for power would be more favorable toward ownership. In effect, the data show that business corporations are preferred by a large majority of students in this sample. Furthermore, the power motive does not appear to have any influence on the stated preference.

SUMMARY

The sample of business administration and engineering students was divided according to high and low levels of need for power and preference for public and private enterprise.

Chi-square analysis was made to test the hypothesis that those who preferred private enterprise had higher levels of need for power than those who preferred public enterprise. This hypothesis was not supported for the entire sample, and it was not supported when the very high and very low levels of need for power were analyzed. An analysis of the percentages preferring private and public enterprise shows that
the levels of need for power are divided in the two enterprise categories in approximately equal proportions. Although students who preferred private enterprise were a substantial majority of the sample (84.57 per cent), there is every indication that the preference for type of enterprise is independent of the need for power.

The academic areas of business and engineering were analyzed to determine whether an association between level of need for power and type of enterprise might exist when those groups were considered separately.

The business administration group showed a higher percentage of high level of need for power students when compared to the engineering group although the analysis was not statistically significant at the .05 level. However, the engineering group preferred private enterprise by 86.93 per cent in contrast to 81.98 per cent of the business group.

Analyses of the data of the business and engineering groups indicated that the differences in proportions of high and low levels of need for power were not significant at the decision level of .05 in public and private enterprise. When the extreme portions of each distribution were examined, a chi-square analysis failed to reveal any significant differences in proportions. In view of the evidence provided by this series of analyses, a high level of need for power had no effect on the preference for type of enterprise within the subgroups.

Theory concerning the power motive had connected the ownership
of business to the satisfaction of controlling one's own enterprise. It was hypothesized that ownership was crucial to a man with a high need for power.

Accordingly, the private enterprise group was divided into high and low levels of need for power and into three groups of enterprise, personal business, family business, and business corporations.

The first analysis was conducted between personal business and business corporations. A second analysis combined personal business with family business as one group and business corporations as the other group. Differences in the proportions of high and low levels of need for power in each enterprise group indicated no statistical significance.

The above analyses did not produce evidence that the level of need for power influenced the preference for the individual's own business.

Academic sub-groups of business administration and engineering were analyzed by combining personal business with family business as one group and business corporations as the second group. These analyses did not show any significant evidence that students with high level of need for power were attracted to their own businesses in greater proportions than students with low levels of need for power.

In conclusion, the hypothesis as stated was--

College juniors and seniors who prefer careers in private enterprise have significantly higher levels of need for power than those who prefer a career in public enterprise.

The analyses conducted indicated no support of the hypothesis when the entire sample was analyzed nor when the extreme portions of the sample
distribution were analyzed. Similar analyses using the sub-groups of business and engineering gave no indication of influence of the power motive on preference for type of enterprise.

In addition, an analysis of the sub-group in private enterprise was made to test the association of high level of need for power and ownership of business. The analyses of this sample did not disclose any association between these two variables. Level of need for power in this sample had no effect on preference for owning an enterprise.
CHAPTER IV

ORGANIZATIONAL SIZE AND THE NEED FOR POWER

INTRODUCTION

Large organizations have become increasingly important in society today. As they have evolved and become more complex, their functioning has been associated more and more in men's minds with "big" government. One reason for the association may be because the bureaucratic organization is conceived as a pyramiding of administrative units. Undoubtedly McClelland combined government and the large bureaucratic organization in one category in his theory of the behavior of men with high levels of need for power. Men with high levels of need for power would perceive the large bureaucratic organization as a restriction on their need to impose their will.

The purpose of this chapter is to test McClelland's theory in a sample of college students to determine if they do in fact prefer smaller organizations and if the preference is associated with the power motive. Specifically, the second hypothesis is:


College juniors and seniors who prefer careers in small- and medium-size organizations have significantly higher levels of need for power than those who prefer large- and giant-size organizations.

Investigation of this hypothesis will provide a more factual basis from which predictions can be made about behavior which is associated with the power motive.

To achieve this goal, it is first necessary to understand some of the reasons for the general assumption that large organizations have bureaucratic characteristics.

LARGE BUREAUCRATIC ORGANIZATIONS AND THE INDIVIDUAL

Before proceeding to the investigation of the association between the power motive and the size of organization, certain explanations are necessary. The idea of bureaucratic tendencies has different meanings in the social sciences.³

Bureaucratic Characteristics

The first usage concerns the orderly arrangement of functional units. This meaning is most often used in the sociological literature in describing the growth of governing units.⁴ The second usage is the Weberian ideal of specialized labor with functions arranged in a


hierarchy of authority. Impersonal rules and procedures are established to govern actions internally and externally. Employment for applicants is based on objective standards set by officials of the organization. The third usage is the popular concept of the bureaucratic organization which sees the maladjustments, the routine, and the complications which arise because of human interaction within the formal bureaucracy.

McClelland's theory appears to associate the large-scale organization with the second usage—the impersonality, the hierarchy of specialized labor, and the standardized rules and procedures which may contribute to the conflict of the personality with a high level of need for power. The conflict occurs within the meaning of the popular concept of bureaucratic organizations.

But why the large organization? To answer this question, the effect of size on the functioning of the organization must be examined.

Size and Bureaucratic Tendencies

Organizations may be analyzed relative to the interaction possibilities existing within and between groups. In this framework, size has an effect on the limits of interaction and the changes which occur in the organizational structure. As a result, size of


6 Crozier, op. cit., pp. 3-4.

7 This analysis is based on Theodore Caplow, "Organizational Size," Administrative Science Quarterly, I (1956-1957), pp. 484-505.
organization directly influences the size of the management group. This view is pertinent here in the sense that college students expect to join a management group.

As the organization diversifies and expands its services or products, the management group becomes larger because of the limitations on the interaction span of any one manager. Thus, sub-units are organized around special functions into a pattern of activity contributing to the over-all objective of the organization. This in turn contributes to a hierarchy of authority for the purpose of coordinating the work flow.

As the management group increases, Caplow sees the following developments:

1. a central record-keeping system;
2. standard procedures for reporting;
3. ranks and grades for personnel;
4. methods of formal evaluation of personnel;
5. use of specialists;
6. mass communication techniques.

These characteristics of large organizations fit very well into the bureaucratic scheme. Impersonal rules and procedures may be used to obtain uniformity of action. The hierarchy of sub-units and the use of mass communication methods lends credence to the thought that policy is made at the top echelon of management and imposed on those below. These conditions may seem to restrict the initiative of the individual.
McClelland saw the personality of the man with a high level of need for power as resisting the imposition of policies and procedures from those in the top echelon of the organization. High level of need for power students would seek situations in which they could exert their influence or control.

The maladjustments, the routine, and the complications arising from the standardization of procedures may adversely affect the desire of the man with a high level of need for power to join a large organization. As Michel Crozier says, the bureaucratic world is an arbitrary world in which people have no way of measuring their own endeavor.8

Therefore, McClelland theorized that an individual with a high level of need for power would prefer a situation in which the management group appeared smaller. There would be more opportunity to exert influence or power within the management group. The next section is designed to test this theory.

ORGANIZATIONAL SIZE AND THE LEVEL OF NEED FOR POWER

Organizational classification by number of employees is difficult to determine and not altogether satisfactory. Individual perceptions differ on what constitutes a large and small organization.

8 Crozier, op. cit., p. 208.
Classification of Groups

The only precedent which can be followed in determining organizational size is the legal classification of a small business. Title 41, U. S. Code Annotated, Section 3306 (k), sets the upper limit of a small business at 500 employees.

In Caplow's analysis of group interaction, the size of the management group was the issue. Determination of the size of the management group by consideration of the number of employees depends generally on the type of work to be done. Caplow classified groups into four categories: small, medium, large, and giant. The classifications were used in the questionnaire for this study to provide a range from which students could make a selection. The medium classification included 501-5,000 employees. The classification of large was considered to be between 5,001 and 10,000 employees. The management group in this category would increase because of the interaction limits of the manager. The giant organization was considered to be over 10,000 employees. Organizations at this stage would necessitate a hierarchy of administration to obtain coordinated effort.

An organization of 500 employees may be considered by students as being the owner-manager type in which policy and procedures are rigidly enforced. The medium organization classification was included in the hypothesis as a preference for men of a higher level of need for power to guard against this perception.

Before a test of the hypothesis was conducted, it seemed advisable to analyze the sample using the various classifications by size.
An analysis of classifications would provide a more valid means of determining whether students of higher levels of need for power might perceive small- and medium-size organizations as satisfying their need to control.

**Analysis of Classifications by Size**

The sample was divided into eight groups, by high and low level of need for power and size of organization by number of employees. The association of level of need for power and size of organization was tested by means of a contingency table.

The proportions of high level of need for power in each classification of organizational size varied from a low of 42.10 per cent in the classification of 5,001-10,000 employees to a high of 55.32 per cent in the classification of 10,000 employees and over. Table 12 shows the data used to ascertain whether the proportion of the high and low levels of need for power differed significantly in the various classifications.

The probability of the value of chi-square was not statistically significant in this case. However, of the total sample, 45.40 per cent preferred the classification of small organization (500 employees and under). The next classification (medium-size organization) was preferred by 29.38 per cent. The combined proportion for small and medium organizations was 74.78 per cent and 25.22 per cent for the large and giant classification of organization. A Harris poll[^1]("Changes, Yes--Upheaval, No," *Life*, LXX (January 8, 1971) pp. 22-27.)
Life magazine of a nation-wide sample of college students showed "big companies" were preferred by 23 per cent of those questioned.

TABLE 12
CONTINGENCY TABLE FOR ALL SUBJECTS
BASED ON LEVEL OF NEED FOR POWER
AND SIZE OF ORGANIZATION*

<table>
<thead>
<tr>
<th>Size of Organization</th>
<th>Level of Need for Power</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>500 and under</td>
<td>67</td>
<td>86</td>
</tr>
<tr>
<td>501-5,000</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>over 10,000</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
<td><strong>177</strong></td>
</tr>
</tbody>
</table>

*Classified by number of employees

\[
\chi^2 = 3.0799
\]

\[
0.30 < p < 0.50
\]

Comparison of the proportions of those who preferred "big companies" in the Harris poll and the proportion of the students in this study who preferred large and giant organizations indicates close agreement between the two—23 per cent and 25.22 per cent, respectively. An analysis of the hypothesis seemed to be founded on valid data.

Analysis of Entire Sample

The subjects were classified as high or low levels of need for power in the same manner as they were for the first hypothesis—the median was 3.37 for the sample. Organizational size was divided into two classifications for these analyses. Small size included 5,000
employees and under; large size included all organizations over 5,000 employees.

Table 13 indicates the preference of students when a chi-square analysis is made using these four classifications.

TABLE 13

INFLUENCE OF LEVEL OF NEED FOR POWER ON PREFERENCE FOR ORGANIZATIONAL SIZE FOR ENTIRE SAMPLE

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Size of Organization</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Large</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>117</td>
<td>43</td>
<td>34.72</td>
<td>160</td>
<td>47.48</td>
</tr>
<tr>
<td>Low</td>
<td>135</td>
<td>42</td>
<td>40.06</td>
<td>177</td>
<td>52.52</td>
</tr>
<tr>
<td>Total</td>
<td>252</td>
<td>85</td>
<td>74.78</td>
<td>337</td>
<td>100.00</td>
</tr>
</tbody>
</table>

\[ x^2 = 0.441035 \]
\[ 0.50 < p < 0.70 \]

The large organization had an almost equal division of high and low level of need for power. The levels of need for power in the small size classification were approximately equal. Level of significance was between .50 and .70, a very low level. According to this analysis, level of need for power had no association with size of organization.

A more sensitive analysis was conducted by use of the extreme portions of the distribution. Very high level of need for power was defined as being the scores of 5 through 11, inclusive. Very low level of need for power was defined as 0 through 2, inclusive. The proportions in these data are given in Table 14.
<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Size of Organization</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Large</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>High</td>
<td>79</td>
<td>35.59</td>
<td>30</td>
<td>13.51</td>
<td>109</td>
</tr>
<tr>
<td>Low</td>
<td>89</td>
<td>40.09</td>
<td>24</td>
<td>10.81</td>
<td>113</td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
<td>75.68</td>
<td>54</td>
<td>24.32</td>
<td>222</td>
</tr>
</tbody>
</table>

\[X^2 = 1.1902\]
\[0.25 < p < 0.30\]

The percentage of high level of need for power increased slightly in the large-size organization. Otherwise there seems to be no difference between high and low levels of need for power in the two sizes of organizations. Level of significance is between .25 and .30.

The proportions of the entire sample who preferred small and large organization remained fairly constant, 75.68 per cent for small organizations and 24.32 per cent for large organizations.

The analyses of the entire sample and the extreme portions of the distribution did not yield any positive results in support of the hypothesis. Individuals with a high level of need for power apparently view the large organization in the same manner as those who have a low level of need for power. Both groups obviously prefer the small organization by a large percentage (74.78), but the preference is not
influenced by the power motive.

According to McClelland's theory, the group would perceive the large organization as similar to government or public enterprise. However, a comparison of the proportions preferring public enterprise and large organizations shows that approximately 10 per cent of the sample are more favorable toward large organizations. This percentage is divided into approximately equal proportions of high and low level of need for power. In effect, the power motive did not influence the perception of the students. Both levels were in agreement in a preference for small organizations.

Yet it seemed appropriate to test the academic groups separately to determine if there were differences connected with area of study.

Analysis of Academic Groups

The opportunities for employment in organizations of a particular size may be one of the factors in the preference for size. Therefore, it seemed advisable from a research standpoint to examine the academic groups. Engineers as a group may consider large organizations more attractive than business students because of the choice of academic study, e.g., petroleum engineering and chemical engineering.

Analysis of Preference for Organizational Size by Academic Groups.--The proportions of the two academic groups preferring small and large organizations are shown in Table 15.
Thirty per cent of the engineering students express a preference for large organizations while 20 per cent of the business students prefer large organizations. There is a difference in preference between the two academic groups, but is it influenced by the level of need for power?

**Association of Level of Need for Power and Organizational Size--**

**Business Students.**--Business students show a much greater preference for small organizations than engineering students. However, Table 16 shows no association between this preference and the level of need for power. Level of significance is between .20 and .25.

Differences between the levels of need for power are not significant when considered by size of organization. Thus, there appears to be no association between the power motive and preference for size of organization in the business group.
TABLE 16
INFLUENCE OF LEVEL OF NEED FOR POWER ON PREFERENCE FOR SIZE FOR BUSINESS STUDENTS

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Number</th>
<th>Percentage</th>
<th>Number</th>
<th>Percentage</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>65</td>
<td>40.37</td>
<td>20</td>
<td>12.42</td>
<td>85</td>
<td>52.79</td>
</tr>
<tr>
<td>Low</td>
<td>64</td>
<td>39.75</td>
<td>12</td>
<td>7.46</td>
<td>76</td>
<td>47.21</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>80.12</td>
<td>32</td>
<td>19.88</td>
<td>161</td>
<td>100.00</td>
</tr>
</tbody>
</table>

$X^2 = 1.5094$
$0.20 < p < 0.25$

A greater proportion of engineering students compared to business students, preferred the large organization. Choice of academic study may have influenced the preference because large organizations are generally predominant in the fields of petroleum engineering and chemical engineering. However, it is still to be determined if power had an influence on preference. Table 17 shows the data from which the statistical analysis was made.

The probability of chi-square in this analysis is between .80 and .90. Although over 30 per cent preferred large organizations, the difference in the proportions of high and low level of need for power had a very low significance level. Therefore, no association of power and size was apparent in the engineering sample.
TABLE 17

INFLUENCE OF LEVEL OF NEED FOR POWER ON PREFERENCE FOR ORGANIZATIONAL SIZE FOR ENGINEERING STUDENTS

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Size of Organization</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Large</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>High</td>
<td>52</td>
<td>29.55</td>
<td>23</td>
<td>13.06</td>
</tr>
<tr>
<td>Low</td>
<td>71</td>
<td>40.34</td>
<td>30</td>
<td>17.05</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>69.89</td>
<td>53</td>
<td>30.11</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.01899 \]

\[ 0.80 < p < 0.90 \]

When the extreme levels of high and low need for power were analyzed for both academic groups (see Tables 3 and 4, Appendix C), there is no association between levels of need for power and preference for size of organization. The level of significance for the extreme portions of the business group was 0.30 < p 0.50, and for the engineering group, 0.25 < p 0.30. The decision level of significance was 5 per cent.

In view of the evidence presented in the analyses of academic groups, McClelland's theory was not supported.

SUMMARY

David C. McClelland concluded from his research that men with a high level of need for power would not prefer to participate in large bureaucratic organizations.
The effect of size on the functioning of the organization was analyzed by considering the interaction possibilities of individuals as the organization expands and diversifies. Interaction possibilities are fewer as the organization grows in size because of the limitations of the interaction span of the individual manager. In turn, sub-units are organized around special functions. As the number of sub-units increases, a hierarchy of authority develops to facilitate coordination of the various functions.

As the management group increases and the number of activities grow and expand, the following bureaucratic characteristics develop:

1. a central record-keeping system;
2. standard procedures for reporting;
3. ranks and grades for personnel;
4. methods of formal evaluation for personnel;
5. use of specialists;
6. mass communication techniques.

These characteristics of the bureaucratic organization may conflict with the theory of the behavior of men with a high level of need for power. According to the theory, the individual's goal is to influence or control others or the world at large. The bureaucratic organization may restrict his actions and impose the will of others from a higher echelon of management. Interaction possibilities with the policy-making level of management may be so remote that the individual feels he will have little opportunity to exert influence within the organization. Imposition of routine procedures may run
counter to the power motive of the individual who desires to influence the situation by his own endeavor.

This theory was tested by dividing the sample into eight groups: high and low levels of power and four classifications of organizational size by number of employees. The four classifications by size gave a wider range for individual choice. When the sample was analyzed by chi-square, no significant association among the power levels and the various sizes was revealed. The analysis did reveal, however, that 74.78 per cent of the sample preferred the two classifications which fell in the range of one to 5,000 employees.

The hypothesis was then tested using four classifications: the need for power was divided at the median of the sample for a high and a low level of need; the organizational size was defined as being (1) a small organization with 5,000 and under employees and (2) a large organization with over 5,000 employees.

Chi-square analyses of the entire sample and of the extremely high and low levels of the distribution of power showed no significant association between the power motive and organizational size. The proportions of high and low levels of need for power were approximately equal in small and large organizations.

An analysis of the academic groups shows that the engineering students prefer large organizations by a greater proportion than business students. However, when the groups were analyzed separately, there were no statistically significant differences between the proportions of high and low level of need for power in the academic
areas. This gave supporting evidence to the finding that no association between the power motive and size of business was present in these groups.

The hypothesis that students who prefer small and medium organizations would have higher levels of power than those who prefer large and giant organizations has not been supported by the data in this sample. The power motive appears to have no association with career preference for size of organization.
CHAPTER V

ATTITUDES TOWARD THE POWER ASPECTS
OF BUSINESS ORGANIZATIONS

INTRODUCTION

The area of human motivation has sought to explain the differences in individual behavior by means of the concept of a mediational sphere of action between the background of the subject and the arousal of a motive. The complete model of motivation, therefore, implies that attitude provides the perceptual framework for this mental evaluation. As a result, preference for a particular type of organization might have been affected by attitudes toward certain aspects of the organization. Therefore, this chapter concerns the following hypothesis:

College juniors and seniors who prefer careers in private enterprise have more favorable attitudes toward certain aspects of the business organization believed to influence the power motive than those who prefer careers in public enterprise.

Selected Aspects of the Business Organization

The aspects chosen to measure the attitudes of the subjects were concepts which were believed to influence the power motive. Opportunities to occupy positions of power and influence were conceived as being capable of eliciting more favorable attitudes among those who prefer private enterprise than those who prefer public
enterprise. Public enterprise is more often thought of in connection
with the implementation of goals set by a higher authority.\textsuperscript{1} The
concepts believed to be related to satisfaction of the power motive are:

C-1. Opportunity To Set Objectives and Assume Responsibility
in Business Career.

C-2. Opportunity Provided by Business Career To Influence
Other People in the Organization.

C-3. Business Career Provides Opportunity for You To Make
Decisions.

C-4. Business Career Provides Challenge to You Through
Competition.

C-5. Opportunity Provided by Business Career To Use Your
Abilities.

C-6. Your Chance To Attain a Position of Prestige in
Business.

Data on the concepts were obtained with a semantic differentia­
tial test. This test is a method of measuring the meaning of a concept
to individuals and groups.

Measurement of Attitudes

In the development of the semantic differential technique,
attitude has been identified as that part of the semantic space which
is concerned with the evaluative dimension.\textsuperscript{2} But this is only part of

\textsuperscript{1}See David C. McClelland, \textit{The Achieving Society} (Princeton,

\textsuperscript{2}Charles E. Osgood, George J. Suci, and Percy H. Tannebaum,
\textit{The Measurement of Meaning} (Urbana, Illinois: University of Illinois
the disposition of the individual toward behavior. The meaning of the concept in the context of a situation provides additional information which can be used as an explanation of behavior. In brief, the same attitude does not automatically imply the same behavior. If the differences occurred on any of the three evaluative scales (good—bad, pleasant—unpleasant, fair—unfair), the attitude toward the concept was different. If the difference occurred on the other six scales, the meaning of the concept was different.

The difference in meaning or attitude could be influenced by the three variables under investigation in this study: type of organization, power, and size of organization. There may be significant differences in attitude when each variable is considered separately. In addition, the analysis shows the difference in attitudes when the variables interact.

ANALYSIS OF STUDENT ATTITUDES AND CAREER PREFERENCE

The analysis investigates first the attitudes of students who prefer public and private enterprise. The hypothesis tested is that those who prefer private enterprise have more favorable attitudes toward business careers than those who prefer public enterprise. Since the results in Chapter III indicated that approximately 85 per cent of the entire sample preferred private enterprise, the purpose of this analysis was to determine whether the attitudes of the

\[^3\textit{Ibid.}, \text{pp. 198-199.}\]
students who preferred private enterprise were significantly different from the attitudes of students who preferred public enterprise.

The relationships are enhanced by subsequent analyses of power, the interaction of power and type of organization, size of organization, and the interactions which resulted when size was combined with type of organization or power.

**Attitudes of Students Who Prefer Public and Private Enterprise**

When the student's attitudes were analyzed by type of organization, there were no significant differences between the private and public groups. Students generally placed a favorable value and meaning on all concepts. In effect, there was no evidence that a positive relationship existed between attitudes toward the power aspects in a business career and preference for a career in private enterprise. Subjects did not differ in attitudes or meaning on any of the concepts at the decision level of .05.

However, further examination of the data in the profiles in Exhibits 1 through 6 shows the interpretation of meaning to the students. Two of the concepts produced a difference in meaning between the two groups at the .066 level of significance. Although this level falls short of the decision criterion of .05, there is some evidence that a positive difference is present in the attitudes of the groups.⁴

EXHIBIT 1

OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

BAD ............................................ GOOD
WEAK ........................................... STRONG
DULL ............................................ SHARP
UNPLEASANT ..................................... PLEASANT
SMALL ........................................... LARGE
SLOW ............................................. FAST
UNFAIR .......................................... FAIR
NARROW ......................................... WIDE
PASSIVE ......................................... ACTIVE

______________ Private Enterprise
----------- Public Enterprise
EXHIBIT 2

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

BAD ________________________ GOOD

WEAK ________________________ STRONG

DULL ________________________ SHARP

UNPLEASANT ________________________ PLEASANT

SMALL ________________________ LARGE

SLOW ________________________ FAST

UNFAIR ________________________ FAIR

NARROW ________________________ WIDE

PASSIVE ________________________ ACTIVE

Private Enterprise

Public Enterprise
EXHIBIT 3

BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS

BAD .................................................. GOOD
WEAK .................................................. STRONG
DULL .................................................. SHARP
UNPLEASANT ........................................ PLEASANT
SMALL .................................................. LARGE
SLOW .................................................. FAST
UNFAIR ................................................ FAIR
NARROW ............................................... WIDE
PASSIVE ................................................ ACTIVE

Private Enterprise
----- Public Enterprise
EXHIBIT 4

BUSINESS CAREER PROVIDES CHALLENGE TO YOU
THROUGH COMPETITION

<table>
<thead>
<tr>
<th>BAD</th>
<th>GOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEAK</td>
<td>STRONG</td>
</tr>
<tr>
<td>DULL</td>
<td>SHARP</td>
</tr>
<tr>
<td>UNPLEASANT</td>
<td>PLEASANT</td>
</tr>
<tr>
<td>SMALL</td>
<td>LARGE</td>
</tr>
<tr>
<td>SLOW</td>
<td>FAST</td>
</tr>
<tr>
<td>UNFAIR</td>
<td>FAIR</td>
</tr>
<tr>
<td>NARROW</td>
<td>WIDE</td>
</tr>
<tr>
<td>PASSIVE</td>
<td>ACTIVE</td>
</tr>
</tbody>
</table>

Private Enterprise

Public Enterprise
EXHIBIT 5

OPPORTUNITY PROVIDED BY BUSINESS CAREER
TO USE YOUR ABILITIES

BAD

GOOD

WEAK

STRONG

DULL

SHARP

UNPLEASANT

PLEASANT

SMALL

LARGE

SLOW

FAST

UNFAIR

FAIR

NARROW

WIDE

PASSIVE

ACTIVE

Private Enterprise

Public Enterprise
EXHIBIT 6

YOUR CHANCE TO ATTAIN A POSITION OF PRESTIGE IN BUSINESS

BAD ................................... GOOD

WEAK ................................... STRONG

DULL ................................... SHARP

UNPLEASANT ................................ PLEASANT

SMALL ................................... LARGE

SLOW ................................... FAST

UNFAIR ................................... FAIR

NARROW ................................... WIDE

PASSIVE ................................... ACTIVE

----- Private Enterprise
------ Public Enterprise
The first concept which showed this level of significance was the opportunity to make decisions. Students who preferred a career in private enterprise described this concept as active. They may view the private sector as a place where there is less routine or more action-oriented work.

In addition, the same group considered the opportunity provided by a business career to use their abilities as a wide opportunity. An opportunity to use one's abilities need not necessarily be associated with the power motive. The concept was used for a reference point as an explanation for career preference. The fact that it was significant to the private enterprise group at a level of .066 seems to substantiate this point. A business career appears to offer a wider opportunity to the students to work in their chosen field.

Although the analysis has not supported the hypothesis that students who choose private enterprise have more favorable attitudes toward the power aspects of business, it lends support to the findings in Chapter III which indicated that career preference was independent of the power motive.

It was felt, however, that further analyses would provide a better description and explanation of student behavior. An analysis of the effect of the level of need for power on attitudes seemed appropriate as the next step in the study.

**Level of Need for Power and Attitudes Toward Aspects of Business Career**

The attitudes under consideration in this investigation were
believed to be influenced by the power motive. Evidence so far in the study has not indicated a positive relationship between high level of need for power and preference for private enterprise. In addition, in the test on attitudes only two concepts approached the decision level of .05—"Business Career Provides Opportunity for You To Make Decisions" and "Opportunity Provided by Business Career To Use Your Abilities."

There was the possibility that the concepts were not related to the power motive although they appeared to be the power positions of the organization. Therefore, the groups were tested by classifying the sample as high and low level of need for power. Definition of high and low need for power was based on the median for the sample.

It will be recalled from Chapter II that the criteria used for selection of the power concepts were:

1. the need to control or influence others or the world at large;

2. the desire for superiority and prestige.

Tests of the semantic differential data on three of the concepts disclose the significant differences in attitudes shown in Tables 18 through 20. High level of need for power felt the concepts relating to (1) influencing other people in the organization and (2) chance to attain a position of prestige were stronger and larger in a business career. These two concepts were judged on the potency factor which indicates that they are strong concepts to students with a high level of need for power.

The third concept was the opportunity to set objectives and
TABLE 18
SIGNIFICANT DIFFERENCES IN ATTITUDES BETWEEN LEVELS OF NEED FOR POWER*

Concept 1.--Opportunity To Set Objectives and Assume Responsibility in Business Career

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level of Need for Power</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td></td>
<td>0.18013</td>
<td>n.s**</td>
</tr>
<tr>
<td>strong</td>
<td></td>
<td>0.13757</td>
<td>&quot;</td>
</tr>
<tr>
<td>sharp</td>
<td></td>
<td>1.57033</td>
<td>&quot;</td>
</tr>
<tr>
<td>pleasant</td>
<td></td>
<td>0.35517</td>
<td>&quot;</td>
</tr>
<tr>
<td>large</td>
<td>High Power</td>
<td>4.61478</td>
<td>0.0304</td>
</tr>
<tr>
<td>fast</td>
<td></td>
<td>1.13431</td>
<td>n.s</td>
</tr>
<tr>
<td>fair</td>
<td></td>
<td>1.35984</td>
<td>&quot;</td>
</tr>
<tr>
<td>wide</td>
<td>Low Power</td>
<td>7.66798</td>
<td>0.0061</td>
</tr>
<tr>
<td>active</td>
<td></td>
<td>0.56449</td>
<td>n.s</td>
</tr>
</tbody>
</table>

*Critical "F" Value : 3.84
**Not significant at the .05 level  
Degrees of freedom₁ = 1  
Degrees of freedom₂ = 329
TABLE 19

SIGNIFICANT DIFFERENCES IN ATTITUDES BETWEEN LEVELS OF NEED FOR POWER*

Concept 2.—Opportunity Provided by Business Career To Influence Other People in the Organization

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level of Need</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td></td>
<td>0.87172</td>
<td>n.s**</td>
</tr>
<tr>
<td>strong</td>
<td>High Power</td>
<td>5.53853</td>
<td>0.0181</td>
</tr>
<tr>
<td>sharp</td>
<td></td>
<td>1.51453</td>
<td>n.s</td>
</tr>
<tr>
<td>pleasant</td>
<td></td>
<td>0.13234</td>
<td>&quot;</td>
</tr>
<tr>
<td>large</td>
<td></td>
<td>0.15350</td>
<td>&quot;</td>
</tr>
<tr>
<td>fast</td>
<td></td>
<td>0.93786</td>
<td>&quot;</td>
</tr>
<tr>
<td>fair</td>
<td></td>
<td>1.31381</td>
<td>&quot;</td>
</tr>
<tr>
<td>wide</td>
<td></td>
<td>0.14718</td>
<td>&quot;</td>
</tr>
<tr>
<td>active</td>
<td></td>
<td>0.13158</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

*Critical "F" Value: 3.84

**Not significant at the .05 level

Degrees of freedom$^1 = 1$

Degrees of freedom$^2 = 329$
TABLE 20
SIGNIFICANT DIFFERENCES IN ATTITUDES BETWEEN LEVELS OF NEED FOR POWER*

Concept 6.--Your Chance To Attain a Position of Prestige in Business

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level of Need</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;F&quot; Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>good</td>
<td>0.88030</td>
<td>n.s**</td>
<td></td>
</tr>
<tr>
<td>strong</td>
<td>1.13060</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>sharp</td>
<td>0.51979</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>pleasant</td>
<td>0.09768</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>large</td>
<td>5.87001</td>
<td>0.0152</td>
<td></td>
</tr>
<tr>
<td>fast</td>
<td>2.06011</td>
<td>n.s</td>
<td></td>
</tr>
<tr>
<td>fair</td>
<td>0.29986</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>wide</td>
<td>1.62979</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>active</td>
<td>2.98578</td>
<td>&quot;</td>
<td></td>
</tr>
</tbody>
</table>

*Critical "F" Value: 3.84
**Not significant at the .05 level

Degrees of freedom\(_1\) = 1
Degrees of freedom\(_2\) = 329
assume responsibility in a business career. While this concept was a potent factor for the power motive, it appeared to appeal to high and low levels of need for power. The researcher was placed in the position of trying to explain why both levels of need for power had favorable meanings toward a concept in the context of a business career.

The most plausible interpretation of this development was that students, regardless of level of need for power or career preference, attached a strong meaning to the concept. A desire for autonomy appears to be present in all students.

For this sample, it appeared that the concepts which were positively related to a level of need for power were the opportunity to influence others and an opportunity to attain a position of prestige.

The foregoing analysis has been based on the comparison of one factor averaged over the levels of the others. Further interpretation is based on the interaction of power and type.

**Interaction of Level of Need for Power and Type of Enterprise**

When the interaction effects of type and power were analyzed, the attitudes of subjects were found to differ significantly on the three concepts which had shown significant differences for the power motive. Type of enterprise had produced no significant differences in attitudes toward the concepts, but an interaction signified there must be some influence of power and type when the two are analyzed.

According to the hypothesis, the students who preferred private enterprise had more favorable attitudes toward the power aspects of a
business career than those who preferred public enterprise. Examination of the means in Tables 21 through 23 shows that where significant interactions occurred, private and public enterprise had favorable means on each concept.

A definite pattern emerges from the analysis. On all the scales, with one exception, the pattern in attitudes and meaning shows similar attitudes held by high level power students who prefer public enterprise and low level power students who prefer private enterprise. This finding also lends support to the results in Chapter III: power and preference for type of enterprise are not positively related. An explanation is also provided for the failure of the data to support the hypothesis tested in this chapter. Attitudes are very similar when they are averaged over type of enterprise.

Interpretation of this particular pattern of interaction raises an interesting question. Why did the students who had a high level of need for power and more favorable attitudes toward these concepts in a business career prefer public enterprise? The attitudes of high level of need for power students who prefer the private sector were less favorable than the low level of need for power in the same classification. Perhaps, as one writer suggests, the wrong question was asked. It was not the power positions that led the students in this sample to prefer private or public enterprise. Some other variable(s) influenced their preference.

---

### TABLE 21
MEANS FOR SIGNIFICANT INTERACTION OF POWER AND TYPE OF ENTERPRISE ON CONCEPT 1

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Private</td>
<td>5.7630</td>
<td>6.2000</td>
</tr>
<tr>
<td>Low</td>
<td>Public</td>
<td>5.9933</td>
<td>5.6296</td>
</tr>
</tbody>
</table>

**Scale—Strong**

| High | 5.5556 | 5.9600 | 7.65096 | 0.0061 |
| Low  | 5.7067 | 5.1481 |         |        |

**Scale—Sharp**

| High | 5.4074 | 6.0000 | 9.50326 | 0.0026 |
| Low  | 5.4267 | 4.7407 |         |        |

**Scale—Large**

Critical "F" Value: 3.84

Degrees of freedom 1 = 1
Degrees of freedom 2 = 329
TABLE 22
MEANS FOR SIGNIFICANT INTERACTION OF POWER AND TYPE OF ENTERPRISE ON CONCEPT 2

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td>&quot;F&quot; Value</td>
</tr>
<tr>
<td>Scale—Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.7185</td>
<td>6.3600</td>
<td>5.37577</td>
</tr>
<tr>
<td>Low</td>
<td>5.9867</td>
<td>5.7407</td>
<td></td>
</tr>
<tr>
<td>Scale—Strong</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.5926</td>
<td>6.3200</td>
<td>6.73750</td>
</tr>
<tr>
<td>Low</td>
<td>5.7000</td>
<td>5.4074</td>
<td></td>
</tr>
</tbody>
</table>

Critical "F" Value: 3.84

Degrees of freedom\(_1\) = 1
Degrees of freedom\(_2\) = 329
TABLE 23
MEANS FOR SIGNIFICANT INTERACTION OF POWER AND TYPE OF ENTERPRISE ON CONCEPT 6

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Type of Enterprise</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td><strong>Scale--Strong</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.6815</td>
<td>6.1600</td>
<td>4.16159</td>
</tr>
<tr>
<td>Low</td>
<td>5.8400</td>
<td>5.5556</td>
<td></td>
</tr>
<tr>
<td><strong>Scale--Sharp</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.5259</td>
<td>5.8000</td>
<td>5.65518</td>
</tr>
<tr>
<td>Low</td>
<td>5.6000</td>
<td>5.2222</td>
<td></td>
</tr>
<tr>
<td><strong>Scale--Large</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.6000</td>
<td>6.0000</td>
<td>5.12399</td>
</tr>
<tr>
<td>Low</td>
<td>5.4800</td>
<td>5.0741</td>
<td></td>
</tr>
<tr>
<td><strong>Scale--Active</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.6889</td>
<td>6.2800</td>
<td>3.95909</td>
</tr>
<tr>
<td>Low</td>
<td>5.7133</td>
<td>5.4074</td>
<td></td>
</tr>
</tbody>
</table>

Critical "F" Value: 3.84

Degrees of freedom\(_1\) = 1
Degrees of freedom\(_2\) = 329
Thus far, the results have been consistent with the results obtained when the first hypothesis was tested. There is no indication that the power motive influenced preference for private enterprise.

The one exception to the general pattern prevailing in the interaction was on the concept, "Your Chance To Obtain a Position of Prestige in Business." On the potency scale, large, the interaction order was the same in both types of enterprise. High level of need for power in private and public enterprise felt this concept was a strong one. Thus, it appears that prestige and high level of need for power are positively related.

Proportions of students who preferred smaller organizations was large (74.78 per cent), so the next step in the analysis was the effect of size on attitudes of the students.

Organizational Size and Attitudes of Students

The classification for size of organization in this analysis was based on two levels, small- and large-size organizations. The division was made at the level of 5,000 employees for the following reasons:

1. The nature of many organizations is based upon repetitive operations so that many hundreds of employees may be supervised by a relatively small management group.

2. The size of the management group influences the degree of interaction which is possible among the members.

The analysis of attitudes on the power aspects of the organization when size is the independent variable resulted in significant
differences on two concepts shown in Tables 24 and 25.

The significant difference found in the meaning of Concept 2 is in the expected direction of small-size organizations. Logically, it could be expected that a small size would indicate the meaning of "opportunity to influence other people in the organization" as fast. The opportunity to interact with the management group would be expected to generate more activity because the management group would be smaller.

Concept 4 aroused the evaluative dimension involving attitudes toward the concept when size was a factor. On every evaluative scale the attitude expressed by those who prefer a career in a large organization was more favorable. The competitive aspect of the business career, then, is probably viewed within the context of large and small organizations. According to this sample, competition is a strong force within large organizations.

In analyzing the effect of size on attitudes, many of the concepts had no significant interaction. The attitudes and meaning were generally favorable toward these concepts in all sizes of organization. However, size did interact with the other variables. The next section examines the results of the interaction.
TABLE 24

SIGNIFICANT DIFFERENCES IN ATTITUDES OF STUDENTS WHO PREFER SMALL AND LARGE ORGANIZATIONS*

Concept 2.--Opportunity Provided by Business Career To Influence Other People in the Organization

<table>
<thead>
<tr>
<th>Scale</th>
<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td></td>
<td>1.60048</td>
<td>n.s**</td>
</tr>
<tr>
<td>strong</td>
<td></td>
<td>3.47317</td>
<td>&quot;</td>
</tr>
<tr>
<td>sharp</td>
<td></td>
<td>1.24502</td>
<td>&quot;</td>
</tr>
<tr>
<td>pleasant</td>
<td></td>
<td>0.61171</td>
<td>&quot;</td>
</tr>
<tr>
<td>large</td>
<td></td>
<td>0.00233</td>
<td>&quot;</td>
</tr>
<tr>
<td>fast</td>
<td>Small size</td>
<td>4.16549</td>
<td>0.0395</td>
</tr>
<tr>
<td>fair</td>
<td></td>
<td>0.34169</td>
<td>n.s</td>
</tr>
<tr>
<td>wide</td>
<td></td>
<td>0.01860</td>
<td>&quot;</td>
</tr>
<tr>
<td>active</td>
<td></td>
<td>0.03987</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

*Critical "F" Value: 3.84
**Not significant at the .05 level
Degrees of freedom\(_1\) = 1
Degrees of freedom\(_2\) = 329
TABLE 25
SIGNIFICANT DIFFERENCES IN ATTITUDES OF STUDENTS WHO PREFER SMALL AND LARGE ORGANIZATIONS*

Concept 4.—Business Career Provides Challenge to You Through Competition

<table>
<thead>
<tr>
<th>Scale</th>
<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>large size</td>
<td>8.80891</td>
<td>0.0036</td>
</tr>
<tr>
<td>strong</td>
<td>large size</td>
<td>5.31895</td>
<td>0.0205</td>
</tr>
<tr>
<td>sharp</td>
<td></td>
<td>0.45114</td>
<td>n.s**</td>
</tr>
<tr>
<td>pleasant</td>
<td>large size</td>
<td>5.00539</td>
<td>0.0244</td>
</tr>
<tr>
<td>large</td>
<td></td>
<td>1.52530</td>
<td>n.s</td>
</tr>
<tr>
<td>fast</td>
<td>large size</td>
<td>4.11150</td>
<td>0.0408</td>
</tr>
<tr>
<td>fair</td>
<td>large size</td>
<td>5.67311</td>
<td>0.0169</td>
</tr>
<tr>
<td>wide</td>
<td></td>
<td>1.06253</td>
<td>n.s</td>
</tr>
<tr>
<td>active</td>
<td></td>
<td>0.02401</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

*Critical "F" Value: 3.84
**Not significant at the .05 level
Degrees of freedom$_1$ = 1
Degrees of freedom$_2$ = 329
Interaction of Size with Other Variables

The interaction effect is particularly appropriate for describing the attitudes and meaning of concepts in organizations by observing the variables under different conditions. The variable, size, has in itself produced a significant difference on Concepts 2 and 4 in attitudes and meaning.

Type and Size of Organization.--In this analysis, the four classifications are public and private enterprise and small and large organizations. Tables 26, 27, and 28 show the significant differences on Concepts 1, 3, and 4.

On each of the concepts, the interaction pattern is of the same form as that found when power and type of organization were analyzed. The attitudes of students who preferred public enterprise and large organizations is similar to the attitudes of students who preferred private enterprise and small organizations.

On one evaluative scale for Concept 4, the interaction was not the same form as the previous scales. In this instance, large organizations in both public and private enterprise felt the challenge of competition was good. This appeared to the researcher to be a further indication that competition may be judged within the organization itself.

The pattern of interaction found in this series of analyses is evidence of the fact that the power aspects of business are not the controlling factor in preference for size. This interpretation is further supported by the results obtained in Chapter IV. When the
TABLE 26
MEANS FOR SIGNIFICANT INTERACTION OF TYPE AND SIZE OF ORGANIZATION ON CONCEPT 1

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Large</td>
<td></td>
</tr>
<tr>
<td>Scale—Fair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>5.6000</td>
<td>6.0909</td>
<td>4.12869</td>
</tr>
<tr>
<td>Private</td>
<td>5.8018</td>
<td>5.4762</td>
<td></td>
</tr>
</tbody>
</table>

Critical "F" Value: 3.84
Degree of freedom₁ = 1
Degree of freedom₂ = 329
TABLE 27

MEANS FOR SIGNIFICANT INTERACTION OF TYPE AND SIZE OF ORGANIZATION ON CONCEPT 3

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Large</td>
<td>&quot;F&quot; Value = 3.84</td>
</tr>
<tr>
<td>Public</td>
<td>5.8667</td>
<td>6.5000</td>
<td>4.03681</td>
</tr>
<tr>
<td>Private</td>
<td>6.0811</td>
<td>5.8730</td>
<td></td>
</tr>
</tbody>
</table>

Critical "F" Value: 3.84


<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>5.6667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>6.1667</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>6.5909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>6.3175</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scale—Good**

**Scale—Pleasant**

**Scale—Fast**

Critical "F" Value: 3.84

Degrees of freedom₁ = 1
Degrees of freedom₂ = 329
association between size and level of need for power was analyzed in that chapter, the classifications were independent.

To complete the analysis, an investigation of the effect of the power motive in the interaction was necessary.

**Effect of Power in Interaction.**—When power interacted with size and when the interaction involved all three variables, type of organization, size, and power, there was only one concept on which the interaction occurred— that of prestige in business. Tables 5 and 6 in Appendix C show the results of the analyses.

Interpretation of the attitudes presented difficulty because of the pattern which was evident in other interactions. This same pattern of high level of power-public and low level of power-private was present when power and type interacted. In that analysis, the influence of the power motive was considered inappropriate. Could it be possible that the interaction represented a desire in all students for recognition?

In developing a measurement for the power motive, Veroff indicated that there may be some confusion with the recognition motive.\(^2\) Since it was quite apparent that the rank of high level of need for power was not constant, the recognition motive presented a more logical interpretation. Furthermore, the frequency of interaction

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on the concept indicated that recognition was of some concern to the students.

The foregoing analyses have not supported the hypothesis that students who prefer private enterprise have more favorable attitudes toward the power aspects of a business career. Descriptive profiles of the students by academic area may give some useful information.

ATTITUDE PROFILE BY ACADEMIC AREA

Approximately 82 per cent of the business students and 86 per cent of the engineering students preferred to work in private enterprise. Attitudes often provide insight into behavior which may result in the motivation of the individual to attain the goals which management has set. Thus, attitudes expressed by the students toward certain issues and concepts in the business environment basically affect their adjustment to the job. It appeared, therefore, that communication of these attitudes was of interest to the business community as a means of assessing the issues which demand attention at this time.

The method of presentation was chosen to emphasize in considerable detail the attitudes and meanings of the concepts to students who may be potential managers. Consideration of the opportunity to submit ideas in the form of setting objectives, making decisions, using one's abilities, and the other positions of influence are sensitive areas which affect a person's motivation to join and remain in the organization and to contribute creatively.
Business Administration Students

Private Enterprise Group.--Out of 161 students of the College of Business Administration, 132 preferred to enter private enterprise. Exhibits 7 through 12 show the attitudes of the students with a high level of power and those with a low level of power.

Attitudes and meanings over the levels of power were not too divergent. Generally favorable attitudes prevailed throughout. It appeared that the least favorable meaning for this particular group occurred in most instances on the scales fast and wide. It is the opinion of the researcher that these two descriptive scales may provide a clue for the preference of the business group for small organizations.

Public Enterprise Group.--A total of 29 students, or 18 percent, of the business administration sample preferred to enter public enterprise. Exhibits 13 through 18 show the attitudes of the high level of power and the low level of power students in this group.

The profiles confirm the results of the analysis on the interaction of power and type of enterprise. Students with a high level of power who prefer public enterprise have more favorable means for the concepts in a business career than students with a high level of power who prefer private enterprise. The one exception to this general rule is the concept concerning the challenge through competition. The competitive atmosphere of a business career is more highly valued in the private enterprise group.
EXHIBIT 7

OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

BAD .................................................. GOOD
WEAK .................................................. STRONG
DULL .................................................. SHARP
UNPLEASANT ........................................ PLEASANT
SMALL ................................................ LARGE
SLOW .................................................. FAST
UNFAIR ................................................ FAIR
NARROW ............................................... WIDE
PASSIVE ............................................. ACTIVE

--- Business High Power-Private
----- Business Low Power-Private
EXHIBIT 8

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

BAD .............................. GOOD
WEAK .................................................. STRONG
DULL .................................................. SHARP
UNPLEASANT ........................................ PLEASANT
SMALL ............................................ LARGE
SLOW .............................................. FAST
UNFAIR ............................................ FAIR
NARROW ......................................... WIDE
PASSIVE ................................. ACTIVE

--- Business High Power-Private
----- Business Low Power-Private
EXHIBIT 9

BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS

BAD  GOOD
WEAK  STRONG
DULL  SHARP
UNPLEASANT  PLEASANT
SMALL  LARGE
SLOW  FAST
UNFAIR  FAIR
NARROW  WIDE
PASSIVE  ACTIVE

---- Business High Power-Private
       Business Low Power-Private
EXHIBIT 10

BUSINESS CAREER PROVIDES CHALLENGE TO YOU
THROUGH COMPETITION

BAD
WEAK
DULL
UNPLEASANT
SMALL
SLOW
UNFAIR
NARROW
PASSIVE

GOOD
STRONG
SHARP
PLEASANT
LARGE
FAST
FAIR
WIDE
ACTIVE

Business High Power-Private
----- Business Low Power-Private
EXHIBIT 11

OPPORTUNITY PROVIDED BY BUSINESS CAREER
TO USE YOUR ABILITIES

BAD ———— GOOD

WEAK ———— STRONG

DULL ———— SHARP

UNPLEASANT ———— PLEASANT

SMALL ———— LARGE

SLOW ———— FAST

UNFAIR ———— FAIR

NARROW ———— WIDE

PASSIVE ———— ACTIVE

—— Business High Power-Private
----- Business Low Power-Private
EXHIBIT 12

YOUR CHANCE TO ATTAIN A POSITION OF PRESTIGE IN BUSINESS

BAD  GOOD

WEAK  STRONG

DULL  SHARP

UNPLEASANT  PLEASANT

SMALL  LARGE

SLOW  FAST

UNFAIR  FAIR

NARROW  WIDE

PASSIVE  ACTIVE

--- Business High Power-Private
----- Business Low Power-Private
EXHIBIT 13

OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

BAD          GOOD
WEAK         STRONG
DULL         SHARP
UNPLEASANT   PLEASANT
SMALL        LARGE
SLOW         FAST
UNFAIR       FAIR
NARROW       WIDE
PASSIVE      ACTIVE

--- Business High Power-Public
----- Business Low Power-Public
EXHIBIT 14

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

BAD ........................................ GOOD
WEAK ........................................ STRONG
DULL ........................................ SHARP
UNPLEASANT ................................ PLEASANT
SMALL ........................................ LARGE
SLOW .......................................... FAST
UNFAIR ....................................... FAIR
NARROW ..................................... WIDE
PASSIVE .................................... ACTIVE

___ Business High Power-Public
----- Business Low Power-Public
BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS

BAD  -----------------------------  GOOD
WEAK  ---------------  STRONG
DULL  ---  SHARP
UNPLEASANT  -------  PLEASANT
SMALL  ----  LARGE
SLOW  -------  FAST
UNFAIR  ------  FAIR
NARROW  ------  WIDE
PASSIVE  ------  ACTIVE

--- Business High Power-Public
------ Business Low Power-Public
BUSINESS CAREER PROVIDES CHALLENGE TO YOU THROUGH COMPETITION

BAD    GOOD
WEAK   STRONG
DULL   SHARP
UNPLEASANT   PLEASANT
SMALL   LARGE
SLOW   FAST
UNFAIR   FAIR
NARROW   WIDE
PASSIVE   ACTIVE

------- Business High Power-Public
-------- Business Low Power-Public
EXHIBIT 17

OPPORTUNITY PROVIDED BY BUSINESS CAREER
TO USE YOUR ABILITIES

BAD

GOOD

WEAK

STRONG

DULL

SHARP

UNPLEASANT

PLEASANT

SMALL

LARGE

SLOW

FAST

UNFAIR

FAIR

NARROW

WIDE

PASSIVE

ACTIVE

Business High Power-Public

Business Low Power-Public
EXHIBIT 18

YOUR CHANCE TO ATTAIN A POSITION OF PRESTIGE IN BUSINESS

BAD  

WEAK 

DULL 

UNPLEASANT 

SMALL 

SLOW 

UNFAIR 

NARROW 

PASSIVE 

GOOD 

STRONG 

SHARP 

PLEASANT 

LARGE 

FAST 

FAIR 

WIDE 

ACTIVE

--- Business High Power-Public
----- Business Low Power-Public
Individual differences are expressed in terms of the ultimate goal of the individual. Even though attitudes of this group may indicate a favorable disposition toward certain aspects of the business career, other values and/or motives may have determined the preference for public enterprise.

**Engineering Students**

Approximately 86 per cent of the total engineering group preferred private enterprise. Only 23 students, or 13 per cent, preferred public enterprise as a career.

**Private Enterprise Group.**—Exhibits 19 through 24 are profiles of both high level of power and low level of power members of the private enterprise group.

When a comparison is made of the two groups, students who have a high level of need for power generally have somewhat less favorable attitudes on all concepts except the competitive aspect of business. Here the difference in attitudes is quite sharply defined on the first group of scales. High level of power students have much more favorable attitudes and meaning on this concept.

**Public Enterprise Group.**—Profiles of the high and low levels of power for the engineering public enterprise group presents a highly ambivalent feeling among the students. Exhibits 25 through 30 provide a picture of strong reaction on the various scales used to describe the concepts.
EXHIBIT 19

OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

BAD  ___________________________  GOOD
WEAK  ___________________________  STRONG
DULL  ___________________________  SHARP
UNPLEASANT  ______________________  PLEASANT
SMALL  ___________________________  LARGE
SLOW  ___________________________  FAST
UNFAIR  ___________________________  FAIR
NARROW  ___________________________  WIDE
PASSIVE  ___________________________  ACTIVE

Engineering High Power-Private
------------ Engineering Low Power-Private
EXHIBIT 20

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

BAD ___________________________ GOOD

WEAK ___________________________ STRONG

DULL ___________________________ SHARP

UNPLEASANT ___________________________ PLEASANT

SMALL ___________________________ LARGE

SLOW ___________________________ FAST

UNFAIR ___________________________ FAIR

NARROW ___________________________ WIDE

PASSIVE ___________________________ ACTIVE

Engineering High Power-Private
Engineering Low Power-Private
EXHIBIT 21

BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS

BAD ............................... GOOD
WEAK ................................ STRONG
DULL ................................ SHARP
UNPLEASANT ......................... PLEASANT
SMALL ................................ LARGE
SLOW ................................ FAST
UNFAIR ................................. FAIR
NARROW ............................... WIDE
PASSIVE .............................. ACTIVE

Engineering High Power-Private
Engineering Low Power-Private
EXHIBIT 22

BUSINESS CAREER PROVIDES CHALLENGE TO YOU
THROUGH COMPETITION

BAD ———— GOOD
WEAK ———— STRONG
DULL ———— SHARP
UNPLEASANT ———— PLEASANT
SMALL ———— LARGE
SLOW ———— FAST
UNFAIR ———— FAIR
NARROW ———— WIDE
PASSIVE ———— ACTIVE

——— Engineering High Power-Private
-------- Engineering Low Power-Private
EXHIBIT 23

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO USE YOUR ABILITIES

BAD

WEAK

DULL

UNPLEASANT

SLOW

UNFAIR

NARROW

PASSIVE

GOOD

STRONG

SHARP

PLEASANT

LARGE

FAST

FAIR

WIDE

ACTIVE

--- Engineering High Power-Private

------ Engineering Low Power-Private
EXHIBIT 24

YOUR CHANCE TO ATTAIN A POSITION OF PRESTIGE IN BUSINESS

BAD ———— GOOD
WEAK ———— STRONG
DULL ———— SHARP
UNPLEASANT ———— PLEASANT
SMALL ———— LARGE
SLOW ———— FAST
UNFAIR ———— FAIR
NARROW ———— WIDE
PASSIVE ———— ACTIVE

--------- Engineering High Power-Private
---------- Engineering Low Power-Private
EXHIBIT 25

OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

BAD  [---]  GOOD  [---]
WEAK [---]  STRONG [---]
DULL  [---]  SHARP  [---]
UNPLEASANT [---]  PLEASANT [---]
SMALL  [---]  LARGE  [---]
SLOW  [---]  FAST  [---]
UNFAIR  [---]  FAIR  [---]
NARROW  [---]  WIDE  [---]
PASSIVE  [---]  ACTIVE  [---]

--- Engineering High Power-Public
------- Engineering Low Power-Public
EXHIBIT 26

OPPORTUNITY PROVIDED BY BUSINESS CAREER TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

BAD  ___________________________ GOOD
WEAK  ___________________________ STRONG
DULL  ___________________________ SHARP
UNPLEASANT  ___________________________ PLEASANT
SMALL  ___________________________ LARGE
SLOW  ___________________________ FAST
UNFAIR  ___________________________ FAIR
NARROW  ___________________________ WIDE
PASSIVE  ___________________________ ACTIVE

--------- Engineering High Power-Public
---------- Engineering Low Power-Public
EXHIBIT 27

BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS

BAD ................................. GOOD

WEAK ................................ STRONG

DULL .................................. SHARP

UNPLEASANT ......................... PLEASANT

SMALL ................................ LARGE

SLOW .................................. FAST

UNFAIR ................................ FAIR

NARROW ................................ WIDE

PASSIVE .............................. ACTIVE

Engineering High Power-Public
---------- Engineering Low Power-Public
EXHIBIT 28

BUSINESS CAREER PROVIDES CHALLENGE TO YOU THROUGH COMPETITION

BAD —— GOOD
WEAK —— STRONG
DULL —— SHARP
UNPLEASANT —— PLEASANT
SMALL —— LARGE
SLOW —— FAST
UNFAIR —— FAIR
NARROW —— WIDE
PASSIVE —— ACTIVE

—— Engineering High Power-Public
----- Engineering Low Power-Public
EXHIBIT 29

OPPORTUNITY PROVIDED BY BUSINESS CAREER
TO USE YOUR ABILITIES

BAD ............................................ GOOD
WEAK ........................................... STRONG
DULL ........................................... SHARP
UNPLEASANT .................................. PLEASANT
SMALL .......................................... LARGE
SLOW ........................................... FAST
UNFAIR ......................................... FAIR
NARROW ........................................ WIDE
PASSIVE ....................................... ACTIVE

Engineering High Power-Public
--------------- Engineering Low Power-Public
YOUR CHANCE TO ATTAIN A POSITION OF PRESTIGE IN BUSINESS

BAD  ----------------> GOOD

WEAK ----------------> STRONG

DULL ----------------> SHARP

UNPLEASANT ------------> PLEASANT

SMALL  --------------> LARGE

SLOW  --------------> FAST

UNFAIR  --------------> FAIR

NARROW  --------------> WIDE

PASSIVE  --------------> ACTIVE

----------------- Engineering High Power-Public
------------- Engineering Low Power-Public
When high level of need for power students in the public sector are compared to the high level of need for power in the private sector, the public enterprise group has a less favorable attitude about the concepts on the scale, pleasant.

As was the case in the business administration group, students who preferred private enterprise had a more favorable attitude toward the competitive aspects of a business career than those who preferred public enterprise.

Concept 3, Business Career Provides Opportunity for You To Make Decisions, is especially interesting since high level of power students describe the concept as slightly unpleasant. The researcher can offer no explanation for such an attitude among high level of power students. The theory of the power motive indicates a strong desire to make decisions which affect the world at large. However, this does not seem to be the case in this sample.

The two academic groups have described the concepts in generally favorable terms. Both academic groups who prefer private enterprise have fairly steady attitudes over scales and concepts. Upon examination of the public groups in business and engineering, however, there appears to be a feeling of ambivalence in attitudes and meanings of the concepts in a business career. It is possible that if these concepts were tested in the context of the public enterprise environment, the attitudes would reflect a more positive feeling.

SUMMARY

The entire sample of students was subjected to a factorial
analysis to determine whether significant differences in attitudes occurred when the effect of three variables, type of enterprise, level of need for power, and size of organization, were tested simultaneously. Two levels of each of the three variables were selected: public and private enterprise; high and low level of power divided at the median for the entire sample; and large and small organizations, arbitrarily divided at 5,000 employees.

The technique chosen to measure the attitudes of the students was the semantic differential. This method measures the attitude and meaning of concepts on several dimensions of meaning.

According to McClelland's theory of the power motive, subjects would have more favorable attitudes toward the concepts tested in this analysis if they preferred private enterprise, had a high level of need for power, or preferred small organizations. Accordingly, the hypothesis to be tested was stated thus:

College juniors and seniors who prefer careers in private enterprise have more favorable attitudes toward certain aspects of the business organization believed to influence the power motive than those who prefer careers in public enterprise.

Analysis of the private enterprise and public enterprise groups showed no significant differences in attitudes at the .05 level. Therefore, the hypothesis as stated was not supported. Attitudes toward concepts believed to be related to the power motive were similar for the private and public group.

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^McClelland, op. cit., p. 296.
There were, however, two concepts which were significant at the .066 level which seem important in this investigation. First, the opportunity to make decisions was described as active by the private enterprise group. Second, the same group had a more favorable attitude toward the opportunity provided by business career to use abilities. This concept seems particularly noteworthy because in no other instance did a significant difference occur on the concept. There was no interaction in later analyses which might have been interpreted in any other way. In addition, this level of significance presents fairly good evidence that a contrast in attitudes does exist between private and public enterprise.

The power motive was tested for effect on attitudes. Significant differences occurred on the concepts concerned with influencing other people in the organization and the chance of attaining a position of prestige. High level of power felt strongly about the concepts.

One concept, "Opportunity To Set Objectives and Assume Responsibility in Business Career," produced favorable attitudes by both high and low level of need for power. The researcher interpreted this to mean that the concept was important to both groups. All students appeared to feel strongly about this aspect of an organization.

Size produced significant differences at the .05 level on two concepts. As predicted, small size had more favorable attitudes on influencing other people. However, the picture changed when large organizations were considered. Large size had more favorable attitudes on the challenge of competition.
In all interactions of the variables, power and type of enterprise, high level of need for power who preferred public enterprise had similar attitudes to those of low level of need for power who preferred private enterprise. The same pattern of interaction occurred when size and type of enterprise was studied. Students in public enterprise who preferred large organizations had similar attitudes on the power aspects as those in private enterprise who preferred small organizations.

Interpretation of the interactions which occurred in the attitude study must be qualified because of the pattern which resulted. For this reason, interpretation of the effect of the power motive on attitudes was considered to be meaningless. Therefore, the interaction data offer evidence to support the findings in Chapter III and IV to the effect that there is no positive relationship between the need for power and career preference.

On other interactions in the study, the concept of attaining a position of prestige appeared to offer some insight into the motives of students. Although there was a great deal of activity on this concept, the pattern of interaction was essentially the same as that discussed above. The researcher interpreted this as an indication that the recognition motive may be considered as one explanation of the interaction. Evidence of the importance of recognition to all students is offered by the number of scales on which significant differences were reported.

Descriptive profiles of the students in the academic areas of business and engineering were drawn from the mean scores on each scale.
The groups were generally favorable over all concepts. However, in both the business and engineering groups, students who prefer public enterprise appear to have very ambivalent feelings toward the concepts in a business career. Students in business and engineering who prefer private enterprise have very similar attitudes regardless of the level of need for power.

These analyses have indicated that preference for a particular type and size of organization has not been influenced by attitudes toward the power aspects of the organization.
For many years the problem of employee motivation has concentrated on the satisfaction of the primary and psychological needs of the individual as the basis for fulfilling the behavioral requirements of the organization. Not only are the psychological needs difficult to determine, but incentives designed to motivate individuals to innovate and improve the system have not been entirely satisfactory. In effect, the behavioral requirement of innovation calls for self-motivation on the part of the individual.

**Theoretical Problem**

Individual motivation is behavior which results from motives and attitudes with varying degrees of strength and intensity. Research indicates that persistence toward a goal is determined by the strength of the motive. Therefore, individuals who have intense needs will be capable of greater motivation. The purpose of this study was to investigate a theory of behavior characterized by a relatively constant motivation.

David C. McClelland and his associates have identified the need for power as a motivational pattern which can be isolated, measured, and used to predict certain behavior believed to be associated
with the power motive. Predicted behavior is based on the satisfaction of the motive derived from the control or influence over another person or group of persons.

This associated behavior indicates the importance of the power motive to the organization. Managers are directly engaged in the process of control or influence over groups of persons. Higher levels of need for power may provide the motivation to advance to higher managerial positions by creating and innovating beyond the role requirements.

Therefore, research on this particular motivational pattern is of interest to organizations in their effort to attract and hold competent managers. Corporate executives have been concerned by the "lack of interest" shown by college students in the economic sector. "Lack of interest" is a serious development because of the need by organizations for a special education and training of college youth. Accordingly, McClelland's theory of behavior associated with the power motive appeared to be an important matter for investigation.

In the course of research on the relationship of personality variables and economic growth, McClelland concluded that a man with a high level of need for power would avoid employment in government or large bureaucratic organizations because he wants to impose his will and not simply implement policy emanating from higher levels of the organization. To provide more information on this theory, the following hypotheses were developed:
Hypothesis 1: College juniors and seniors who prefer careers in private enterprise have significantly higher levels of need for power than those who prefer a career in public enterprise.

Hypothesis 2: College juniors and seniors who prefer careers in small- or medium-size organizations have higher levels of need for power than those who prefer careers in large- or giant-size organizations.

In the evaluation of alternative careers, attitudes of the students are the perceptual framework within which the evaluation takes place. Therefore, an investigation of the attitudes of the students was considered important from the standpoint of providing an explanation of their behavior. Accordingly, the research was expanded to include the following hypothesis:

Hypothesis 3: College juniors and seniors who prefer careers in private enterprise have more favorable attitudes toward certain aspects of the business organization believed to influence the power motive than those who prefer careers in public enterprise.

The next step in the investigation was the determination of the methodology used to collect and analyze the data.

Methodology

Data for the investigation was collected on career preference, the need for power, and attitudes of college students.

Selection of Subjects.--Subjects were selected from the areas of business administration and engineering at Louisiana State University. These students were selected because recruitment by business organizations is heavily concentrated in these two academic
areas. In addition, availability of employment in the public sector represents an alternative for the students. A total of 337 juniors and seniors participated in the study.

**Research Instrument.**—The research instrument was in three parts. One, a questionnaire provided the basis for classification of subjects by preference for a career. Two, a Thematic Apperception Test tested the need for power. Three, the semantic differential test collected the data which was used to measure the attitudes and meaning of aspects of a business career.

**Statistical Analysis.**—The nature of the data for the first two hypotheses was not exact in a numerical sense. Type and size of organization were dichotomies, and level of need for power was defined by dividing the distribution at the median into high and low levels. For this reason, the chi-square test of independence of classification was chosen for the statistical analysis.

The third hypothesis was tested by analysis of variance using a factorial analysis as the experimental design. In this manner, it is possible to examine several independent variables simultaneously, as well as the effect of various combinations of the variables.

Criterion for the level of significance was .05 for all hypotheses. This level of significance seemed to be a reasonable basis for concluding that a difference was significant.
Experimental Evidence on Type of Enterprise and Size of Organization

Association between high level of need for power and career preference was investigated first for type of enterprise and second for size of organization. Other analyses included extreme portions of the distribution, academic areas, and the private enterprise group.

Level of Need for Power and Type of Enterprise.--Subjects were classified by high and low level of need for power and by private and public enterprise. Private enterprise was the choice of 84.57 per cent of the sample. Only 15.43 per cent preferred a career in public enterprise. Chi-square analysis of the groups resulted in a very low level of significance, indicating almost complete agreement between the observed frequencies and expected frequencies.

A second analysis was conducted with the extreme portions of the distribution, thus eliminating those scores which clustered around the median. This analysis did not determine a significant relationship between a higher level of need for power and preference for a career in private enterprise.

According to the theory, motivation is a multiplicative function of the strength of the motive, the subjective probability of success, and the incentive value of success. Men with a higher level of need for power would prefer a course of action they perceived would satisfy their disposition to control or influence others.

McClelland concluded that joining the public enterprise system would be distasteful to men with a high level of need for power because
of the nature of the organization. Objectives are politically determined and policies are implemented by the use of rules and procedures to insure conformity. In brief, subjects with a high level of need for power would perceive the situation in private enterprise as an opportunity to impose their will. However, the analyses conducted to test this theory indicated that the classifications were independent.

Some of the inconsistency could have been caused by the difference in subjects—college students were tested in this sample; managers in public and private enterprise were tested in McClelland's research. However, college students are well informed and there is no reason to assume that they would be unaware of the particular characteristics of public enterprise which might be objectionable to men with high levels of need for power.

In addition to the above, analyses were conducted in each academic area in order to detect possible differences in the association between level of power and career preference. No significant relationship was found in the business administration group or in the engineering group. Analysis of the extreme portions of each distribution gave the same results.

Although the analyses had not indicated any substantial evidence to support McClelland's theory of behavior, there was a possibility that an examination of the private enterprise group might prove to be more fruitful.

Level of Need for Power and Ownership of Business.—McClelland implied in his research that men with a high level of need for power
would probably view ownership as a crucial issue because of their disposition to control. Accordingly, the private enterprise group was divided into groups and analyzed.

The first analysis was conducted by dividing private enterprise into two categories: personal business and business corporations. Chi-square analysis indicated that career preferences were relatively independent of the levels of need for power.

In the second analysis, the ownership group was enlarged by including subjects entering a family business. Thus the four groups in this analysis were: high and low levels of power; personal and family business as one business group and business corporations as another. The classifications showed no significant relationship in the test between a higher level of need for power and ownership of business.

Subsequent analyses using the same classifications in each academic area indicated that the level of need for power had no influence on preference for ownership.

The need for power has not been related to subjects' behavior according to the data in their preference for private enterprise or ownership of business. Preference for size of organization was considered in the next series of analyses.

**Organizational Size and the Need for Power.** McClelland based his theory of the behavior of men with high need for power on the bureaucratic characteristics of large organizations. For example, as large organizations expand and diversify, the functions of specialized groups increase; sub-units of administration are organized because of
the limitations imposed by the interaction span of the manager; and a hierarchy of authority is established to coordinate the flow of work. Moreover, as the coordination needs increase, routine procedures are installed, a central-record keeping system is developed, and standardized communication techniques are used to disseminate information.

These developments run counter to the theorized behavior of the man with a high level of need for power. Routine and standardized procedures may be interpreted by him as arbitrary decisions of higher authority. As a result, he may have no degree of influence in determining his own endeavor. Therefore, it was hypothesized that a man with this personality would avoid the large bureaucratic organization.

The large organization was classified as over 5,000 employees, a classification which was tentatively supported by other research on the perception of students of "big" organizations.

The first analysis was conducted by constructing a contingency table of four classifications by size: small, medium, large, and giant. Chi-square analysis showed these classifications to be relatively independent of the level of need for power. The significance level was very low—between .30 and .50.

Further analyses using the large and small classifications of organization and the high and low levels of power gave no indication of a positive relationship between the two variables. Although 74.78 percent of the sample preferred a small organization for a career, level of need for power did not appear to influence subjects' choice.

Extreme portions of the distribution and separate academic
areas were analyzed by a similar procedure with no significant results. Students appear to evaluate the alternatives of large and small organizations without the influence of level of need for power.

However, the data revealed that within academic groups the engineering group showed a greater percentage who preferred large organizations than did the business administration group.

The attitudes of subjects on certain aspects of the organization are examined next in order to explain the findings of the first and second hypotheses.

**Experimental Evidence on Attitudes**

According to McClelland's theory of the power motive, men with high levels of need for power would perceive public enterprise and large bureaucratic organizations as unpleasant careers. Therefore, attitudes of students who preferred a career in private enterprise would be more favorable toward aspects of the business organization believed to influence the power motive than those who preferred a career in public enterprise.

Selection of the concepts for the attitude study was based on research of the issues which will concern students in their chosen careers. Attitude data were obtained on the following concepts:

- **C-1.** Opportunity To Set Objectives and Assume Responsibility in Business Career.
- **C-2.** Opportunity Provided by Business Career To Influence Other People in the Organization.


C-5. Opportunity Provided by Business Career To Use Your Abilities.

C-6. Your Chance To Attain a Position of Prestige in Business.

Results of the analysis are reported in the following sections.

**Attitudes and Type of Enterprise.**—The first analysis was to test the effect of preference for type of enterprise. This test did not reveal any significant differences at the level of .05 between the attitudes of students who preferred private enterprise and those who preferred public enterprise. Attitudes toward the power aspects of a business career were generally favorable in both private and public enterprise.

However, two concepts were significant at the .066 level, which indicates fairly good evidence there is a contrast in attitudes. Private enterprise had more favorable attitudes on concepts C-3 and C-5. Decision making appeared action-oriented to the private group since the description was illustrated by the word active. Furthermore, C-5 had only one reaction in the entire study. The private enterprise group described this concept as wide.

**Attitudes and Level of Power.**—When the analysis was conducted
to test the effect of high and low levels of need for power, significant differences occurred on C-1, C-2, and C-6. On C-1, high and low level of need for power had favorable attitudes on different scales. On C-2 and C-6, high level of need for power had more favorable attitudes.

Attitudes and Size of Organization.--This analysis produced significant differences on C-2 and C-4. Students who preferred small organizations described the opportunity to influence other people as fast. Students who preferred large organizations had more favorable attitudes on C-4 regarding competition in a business career.

Level of Need for Power and Interactions.--Significant differences occurred on C-1, C-2, and C-6 when levels of need for power interacted with other variables on the scales. However, the pattern of interaction which developed showed that high level of power students-public enterprise had similar attitudes and meanings as those of low level of power students-private enterprise. This evidence indicated to the researcher that level of need for power was not influential in shaping the attitudes of students. As a result, it appeared that the data offered support to the previous findings in the tests of the first two hypotheses.

On the other hand, considerable activity took place on C-6. Although the power motive was always a part of the activity, the researcher felt it could not be interpreted as an influence for the reasons given above. The only other interpretation to be drawn from
the activity is that the recognition motive played a role in shaping attitudes on this subject. The recognition motive is apparently a strong motive in all students as evidenced by the number of scales on which significant differences occurred.

**Academic Profiles.**—The mean scores for the scales were used to construct profiles of the business administration and engineering groups. Students in both groups who preferred private enterprise were generally favorable on all concepts.

Students who preferred public enterprise appeared to have rather ambivalent attitudes toward the concepts of a business career.

**CONCLUSIONS**

Conclusions drawn from this investigation serve to modify certain theoretical predictions of the behavior of men with a high level of need for power, at least for the subjects included in the study.

One, high level of need for power does not appear to have an association with the preference of students for a career in private enterprise or a small organization. The hypotheses as stated were not confirmed.

Two, there was no evidence to support the theory that ownership was a crucial issue in the career preference of men with a high level of need for power. No doubt other variables have a marked effect on the decision for ownership, but the students were asked specifically for their preference.
Three, the attitude study appeared to confirm the results of the first two hypotheses. Subjects who prefer a career in private enterprise have attitudes similar to those who prefer public enterprise concerning the power aspects of business.

Four, private enterprise and small organizations are the overwhelming preference of students. Other variables appear to influence the evaluation of alternatives, but the disposition is to avoid public enterprise and the large organization.

Five, within the academic sub-groups, engineers show a greater preference for large organizations when compared to business students. The need for power, however, did not appear to influence the preference.

Six, as a possible explanation for the preferences exercised by subjects, the work itself in the context of the public and private environment may provide the motivation to enter a career in private enterprise. For example, one instance in which there was fairly substantial evidence that a difference in meaning existed between the two groups occurred on the concept concerning the opportunity to use one's abilities. The word used to describe this concept was *wide*, a description which was interpreted to mean that subjects may consider public enterprise as restrictive.

Moreover, the work itself has been considered as a means of providing motivation in the organization.¹ Students in the academic areas of business administration and engineering have spent four or

five years acquiring knowledge and skills for a career. Therefore, when they have obtained a degree, they may believe that private enterprise offers a wider opportunity to use their specialized knowledge.

Seven, the opportunity to have some discretion in the use of their abilities may have motivated subjects to prefer private enterprise. Another instance in which fairly good evidence indicated that the private group differed from the public group was on the concept of the opportunity to make decisions. The polar adjectives on which this difference was recorded were active--passive. Choice of the adjective active may be interpreted as meaning less routine or more personal independence in the performance of their work.

Eight, recognition in a career is an important factor to all students. Conclusions cannot be drawn regarding any particular combination of variables because of the mixed interactions which occurred. However, the frequency of response implied that recognition may be a significant element when applied to the motivational process.²

The negative results obtained in this study on the behavior of men with a high need for power may be due to the fact that arousal of the motive occurs more often in the work environment. However, the power motive has been considered by psychologists as a relatively constant motivational factor and, as such, would appear to influence

the behavior of students. The behavior itself in relation to career preference was in the predicted direction, but its relationship with the power motive was not in agreement with the hypotheses.

Furthermore, if the need for power is found to be a desirable attribute for managers, further research will be necessary before a reliable means of identification can be developed.

The next section presents recommendations based on the foregoing conclusions.

RECOMMENDATIONS

The objectives of the recommendations are twofold: (1) the specific direction for research and (2) the needs of the business community.

One, a study needs to be undertaken using a sample of the students participating in this investigation to determine if subjects enter their preferred career. The study also needs to investigate the extent to which their expectations of a career correspond to the actual experience.

Two, further research needs to be conducted on the attitudes toward opportunities in public enterprise.

Three, research in the academic areas needs to investigate the question of choice of major field of study and a career in private enterprise or a particular size of organization. In effect, is choice of academic study related to area of interest, economics, or size and type of organization? Other variables such as travel, prestige, and
competition rather than the economics of the situation may influence preference for size and type of enterprise.

Four, more research needs to be done in the area of the behavior of men with high needs for power. Behavior cannot be inferred from the attitudes of the subjects in this study.

Five, studies similar to this one need to be made at this and other universities to see if the same attitudes and behavior are widespread among college youth.

Six, research is needed to determine what variables enter into the preference for a career in private enterprise and small organizations.

Seven, the study indicated a desire on the part of students for a certain amount of independence in their work. There is a need for further research on the desire for individualism in college youth and its significance in the motivational process.

Eight, the response to recognition indicated that management in organizations may benefit from research into this factor as a means of motivation.

Nine, if the business community feels that the need for power is important in managerial success, there must be a measurement developed to identify these people. This study did not indicate career choice was a valid predictor of the need.

There is a lack of information on the college student, his expectations in a career and the variables which enter into his
motivation to join an organization. Since he will shape the private and public enterprise in the future, his attitudes and behavior are significant to the motivational process to join and improve the organization.
BIBLIOGRAPHY

Books


Periodicals


**Miscellaneous**


Winter, David G. *A Revised Scoring System for the Need for Power (N Power)*. Cambridge, Massachusetts: By the Author, 1968.

APPENDIX A

The Research Instrument
Please answer the questions to the best of your knowledge at this time.

1. Age _________

2. Permanent home address ____________________________________________

3. Academic classification
   3-1. Freshman _________
   3-2. Sophomore ________
   3-3. Junior __________
   3-4. Senior _________
   3-5. Other ____________

4. Major area of study
   4-1. Business _________
   4-2. Engineering ______
   4-3. Other ____________

5. What occupational area do you prefer to enter as a career when you receive your Bachelor degree? If you intend to enter graduate school, please check the area you prefer to enter upon completion of your graduate degree. If the armed forces is a temporary goal, check your career preference upon completion of this obligation.
   5-1. _____ your own business
   5-2. _____ your family's business
   5-3. _____ government service (local, State, Federal)
   5-4. _____ teaching profession
   5-5. _____ armed forces
   5-6. _____ a business corporation
   5-7. _____ a charitable organization
   5-8. _____ private foundation (such as Ford, Rockefeller)
   5-9. _____ other

6. Please check below the size organization (by number of employees) in which you would prefer to work.
   6-1. _____ 500 and under employees
   6-2. _____ 501 - 5,000 employees
   6-3. _____ 5,001 - 10,000 employees
   6-4. _____ over 10,000 employees
INSTRUCTIONS FOR TEST OF IMAGINATION

(PLEASE READ CAREFULLY)

On the following pages are three pictures designed to test your imaginative ability. Express your creativity by writing your ideas about each situation pictured. Following each picture is a page for your story, and the following questions will be on each page to help you organize your thoughts:

1. What is happening? Who are the people?
2. What has led up to this situation? What has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?

The questions are only guides to organize your thinking. The story should be a continuous one—interesting and dramatic. Don't describe the pictures. Put yourself into this situation and write about the human relationships and reactions which you feel would take place in the circumstances suggested by the pictures.

Any story you choose to write will be all right—there are no right or wrong stories. The pictures are vague for the specific purpose of allowing you to imagine a story in your own way.

Five minutes per story is the allotted time. I will keep time and tell you when to turn to the next picture. If you understand the instructions turn the page, look at the first picture briefly and write your story.
DON'T SPEND OVER 5 MINUTES ON THIS STORY.

What is happening? Who are the people? What has led up to this situation? What has happened in the past?

What is being thought? What is wanted? By whom? What will happen? What will be done?

When your time is up, please go to the next picture.
DON'T SPEND OVER 5 MINUTES ON THIS STORY.

What is happening? Who are the people? What has led up to this situation? What has happened in the past?

What is being thought? What is wanted? By whom? What will happen? What will be done?

When your time is up, please go to the next picture.
DON'T SPEND OVER 5 MINUTES ON THIS STORY.

What is happening? Who are the people? What has led up to this situation? What has happened in the past?

What is being thought? What is wanted? By whom? What will happen? What will be done?

When your time is up, please go to the next page.
INSTRUCTIONS

The following pages are intended as a measurement of certain concepts by having you judge them against descriptive scales. The scales are intended to provide several dimensions of meaning for you to judge your attitude toward the concept at the top of the page.

The scales are related to the descriptive words as follows:

If you feel that the concept is extremely good or bad, place a check thus:

good :X::___:::___:::___:::___:::___:::___: bad
or
good ::___:::___:::___:::___:::___:::___:::___: bad

If you feel that the concept is quite good or bad, thus:

good ::___::X::___:::___:::___:::___:::___:::___: bad
or
good ::___::___:::___::X::___:::___:::___:::___:::___: bad

If you feel that the concept is slightly good or bad, thus:

good ::___::___::X::___:::___:::___:::___:::___:::___: bad
or
good ::___::___::___::X::___:::___:::___:::___:::___: bad

If you have no feeling about the concept at all or if you feel the scale is not relevant to the concept, then place a check thus:

good ::___::___::___::X::___:::___:::___:::___:::___: bad

IMPORTANT. Please read the scale carefully and mark the center of the spaces.

This -- good :X::___:::___:::___:::___:::___:::___:::___: bad
Not This -- good :___::X::___:::___:::___:::___:::___:::___: bad

Read each concept and scale carefully but work as quickly as you can, your first impression is the important one. Make an independent judgment on each scale even though it may be puzzling to you. It is your attitude toward the concept that is important, so please give your honest impression.

Judge each concept independently--they are separate concepts. None has been repeated in the test. If you understand the instructions, turn the page and begin.
OPPORTUNITY TO SET OBJECTIVES AND ASSUME RESPONSIBILITY IN BUSINESS CAREER

good :___:___:___:___:___:___:___: bad

weak :___:___:___:___:___:___:___: strong

sharp :___:___:___:___:___:___:___: dull

unpleasant :___:___:___:___:___:___:___: pleasant

large :___:___:___:___:___:___:___: small

slow :___:___:___:___:___:___:___: fast

fair :___:___:___:___:___:___:___: unfair

wide :___:___:___:___:___:___:___: narrow

passive :___:___:___:___:___:___:___: active
OPPORTUNITY PROVIDED BY BUSINESS CAREER
TO INFLUENCE OTHER PEOPLE IN THE ORGANIZATION

good :___:___:___:___:___:___:___: bad

weak :___:___:___:___:___:___:___: strong

sharp :___:___:___:___:___:___:___: dull

unpleasant :___:___:___:___:___:___:___: pleasant

large :___:___:___:___:___:___:___: small

slow :___:___:___:___:___:___:___: fast

fair :___:___:___:___:___:___:___: unfair

wide :___:___:___:___:___:___:___: narrow

passive :___:___:___:___:___:___:___: active
BUSINESS CAREER PROVIDES OPPORTUNITY FOR YOU TO MAKE DECISIONS


wide : _ : _ : _ : _ : narrow

**BUSINESS CAREER PROVIDES CHALLENGE TO YOU THROUGH COMPETITION**

<table>
<thead>
<tr>
<th>good</th>
<th>bad</th>
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</thead>
<tbody>
<tr>
<td>weak</td>
<td>strong</td>
</tr>
<tr>
<td>sharp</td>
<td>dull</td>
</tr>
<tr>
<td>unpleasant</td>
<td>pleasant</td>
</tr>
<tr>
<td>large</td>
<td>small</td>
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<tr>
<td>slow</td>
<td>fast</td>
</tr>
<tr>
<td>fair</td>
<td>unfair</td>
</tr>
<tr>
<td>wide</td>
<td>narrow</td>
</tr>
<tr>
<td>passive</td>
<td>active</td>
</tr>
</tbody>
</table>
OPPORTUNITY PROVIDED BY BUSINESS CAREER TO USE YOUR ABILITIES

good :___:___:___:___:___:___:___: bad
weak :___:___:___:___:___:___:___: strong
sharp :___:___:___:___:___:___:___: dull
unpleasant :___:___:___:___:___:___:___: pleasant
large :___:___:___:___:___:___:___: small
slow :___:___:___:___:___:___:___: fast
fair :___:___:___:___:___:___:___: unfair
wide :___:___:___:___:___:___:___: narrow
passive :___:___:___:___:___:___:___: active
YOUR CHANCE TO ATTAIN A POSITION OF
PRESTIGE IN BUSINESS

good : __:___:___:___:___:___:___: bad

weak : __:___:___:___:___:___:___: strong

sharp : __:___:___:___:___:___:___: dull

unpleasant : __:___:___:___:___:___:___: pleasant

large : __:___:___:___:___:___:___: small

slow : __:___:___:___:___:___:___: fast

fair : __:___:___:___:___:___:___: unfair

wide : __:___:___:___:___:___:___: narrow

passive : __:___:___:___:___:___:___: active
APPENDIX B

FREQUENCY DISTRIBUTION OF NEED FOR POWER
TABLE B-1

FREQUENCY DISTRIBUTION OF SCORES ON NEED FOR POWER FOR ENTIRE SAMPLE

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Number = 337
Median = 3.37
Mean = 3.58
Standard Deviation = 2.24
# TABLE B-2

**FREQUENCY DISTRIBUTION FOR SCORES ON NEED FOR POWER FOR ENGINEERING STUDENTS**

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Number = 176  
Median = 3.12  
Mean = 3.28  
Standard Deviation = 2.14
TABLE B-3
FREQUENCY DISTRIBUTION FOR SCORES ON NEED
FOR POWER FOR BUSINESS STUDENTS

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Number = 161
Median = 3.70
Mean = 3.91
Standard Deviation = 2.31
APPENDIX C

SUPPLEMENTARY TABLES
TABLE C-1

INFLUENCE OF LEVEL OF NEED FOR POWER ON PREFERENCE IN PRIVATE BUSINESS FOR BUSINESS STUDENTS

<table>
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<td>Total</td>
<td>42</td>
<td>31.82</td>
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\[ x^2 = 0.7508 \]

0.30 < p < 0.50
TABLE C-2

INFLUENCE OF LEVEL OF NEED FOR POWER ON PREFERENCE IN PRIVATE BUSINESS FOR ENGINEERING STUDENTS

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\[ x^2 = 0.7285 \]

\[ 0.30 < p < 0.50 \]
TABLE C-3

INFLUENCE OF EXTREME LEVELS OF NEED FOR POWER ON PREFERENCE FOR ORGANIZATIONAL SIZE FOR BUSINESS STUDENTS

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
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\[X^2 = 1.0646 \quad C = 0.1391\]

\[0.30 < p < 0.50\]
**TABLE C-4**

**INFLUENCE OF EXTREME LEVELS OF NEED FOR POWER ON PREFERENCE FOR ORGANIZATIONAL SIZE FOR ENGINEERING STUDENTS**

<table>
<thead>
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<th>Level of Need for Power</th>
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<td><strong>69.03</strong></td>
<td><strong>35</strong></td>
<td><strong>30.97</strong></td>
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\[ \chi^2 = 1.2990 \quad \text{C} = 0.1508 \]

\[ 0.25 < p < 0.30 \]
TABLE C-5

MEANS FOR SIGNIFICANT INTERACTION OF LEVEL OF NEED FOR POWER AND SIZE OF ORGANIZATION ON CONCEPT 6

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<th>Size of Organization</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
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<tr>
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<td>5.4593</td>
<td>5.2857</td>
<td></td>
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</table>

**Scale--Large**

**Scale--Wide**

| High                   | 5.0171               | 5.3488    | 3.85609 | 0.0474 |
| Low                    | 5.1630               | 5.0000    |      |

Critical "F" Value: 3.84

Degrees of freedom$_1$ = 1
Degrees of freedom$_2$ = 329
### TABLE C-6

**Means of Significant Interaction of Type of Enterprise, Level of Need for Power, and Size of Organization on Concept 6**

<table>
<thead>
<tr>
<th>Level of Need for Power</th>
<th>Size of Organization</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
<th>&quot;F&quot; Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>Large</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scale—Sharp</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>High</td>
<td>5.5833</td>
<td>5.6571</td>
<td>6.0000</td>
<td>5.0667</td>
<td>5.10347</td>
<td>0.0231</td>
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</tr>
<tr>
<td>Low</td>
<td>5.3889</td>
<td>5.5128</td>
<td>4.8889</td>
<td>5.9091</td>
<td>0.0133</td>
<td>0.0031</td>
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</tr>
<tr>
<td><strong>Scale—Large</strong></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.4167</td>
<td>5.6476</td>
<td>6.5385</td>
<td>5.4333</td>
<td>7.41976</td>
<td>0.0069</td>
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</tr>
<tr>
<td>Low</td>
<td>5.4444</td>
<td>5.4615</td>
<td>4.3333</td>
<td>5.5455</td>
<td>0.0455</td>
<td>0.0045</td>
<td></td>
</tr>
<tr>
<td><strong>Scale—Fast</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5.0000</td>
<td>5.1143</td>
<td>5.8462</td>
<td>4.8000</td>
<td>3.92453</td>
<td>0.0455</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>5.3889</td>
<td>4.9487</td>
<td>4.2222</td>
<td>4.6970</td>
<td>0.0455</td>
<td>0.0045</td>
<td></td>
</tr>
</tbody>
</table>

Critical "F" Value: 3.84
Degrees of freedom\(_1\) = 1
Degrees of freedom\(_2\) = 329
VITA

Virginia Swann Hill, daughter of Robert F. and Myra Coffey Swann, was born January 2, 1918, in Dante, Virginia, was graduated from St. Paul High School in 1934, and attended Mary Washington College, Fredericksburg, Virginia, from 1934 to 1936.

Considerable work experience in government and private industry was acquired during the next several years. However, the experience was not continuous because of family responsibilities.

In June, 1965, the author enrolled in the University of Southern Mississippi and received a Bachelor of Science in Business Administration in 1967. While serving as a Graduate Fellow, she completed the degree for Master of Business Administration in August, 1968.

The next nine months were spent as an instructor in the Department of Management at the University of Southern Mississippi. In June, 1969, the author enrolled in the doctoral program at Louisiana State University. In September, 1971, she returned to the University of Southern Mississippi as Assistant Professor in the Department of Management and at the present time is a candidate for the degree of Doctor of Philosophy in Management.
Candidate: Virginia S. Hill

Major Field: Management

Title of Thesis: An Investigation of the Association between Level of Need for Power and the Career Preference of College Juniors and Seniors at Louisiana State University

Approved:

[Signatures of Major Professor and Chairman, Dean of the Graduate School]

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

March 15, 1972