1 OF 4
AD A
114459

NPS54-81-013

NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

A COMPARISON AND ANALYSIS
OF ARMY GENERALS AND EXECUTIVES

by

Andrew E. Adams

and

Mark W. Boyer

December 1981

Thesis Advisors: R. A. McGonigal
J. W. Creighton

Approved for public release; distribution unlimited.

DTIC
ELECTE
MAY 17 1982
E

82 05 17 002

NAVAL POSTGRADUATE SCHOOL
Monterey, California

Rear Admiral J. J. Ekelund   David A. Schrady
Superintendent   Acting Provost

Released as a
Technical Report by:

WILLIAM M. TOLLES
Dean of Research

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
NPS54-81-013	AD-A114457	

4. TITLE (and Subtitle)	5. TYPE OF REPORT & PERIOD COVERED
A Comparison and Analysis of Army Generals and Executives	Master's Thesis; December 1981
	6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)	8. CONTRACT OR GRANT NUMBER(s)
Andrew E. Adams Mark W. Boyer	

9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT. PROJECT, TASK AREA & WORK UNIT NUMBERS
Naval Postgraduate School Monterey, California 93940	

11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE
Naval Postgraduate School Monterey, California 93940	December 1981
	13. NUMBER OF PAGES
	293

14. MONITORING AGENCY NAME & ADDRESS(If different from Controlling Office)	15. SECURITY CLASS. (of this report)
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Executive Selection	Decision-Making Capability
Executive Capacity Indicators	Reaction to Conflict
Leadership	Situational Stimuli
Army Generals	Military Decisions

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This research continues the study by Leshko and Vosseteig (1975) along with further research conducted by Rowe, Rudeen, and Wenke (1976) in the use of situational stimuli as an aid in identifying and measuring executive capacity. Hypothesis testing was conducted that used capacity indicators which had been previously identified and isolated. Conclusions to the earlier studies claim that an individual's response to

1

the questionnaire can be used to predict the potential
success or failure of that individual in an executive role.
Whereas prior research deals with executives within the
private sector, the data base used in this study was
comprised of top military decision makers (07 and above)
from within the United States Army. The data from this
study was compared with those responses from the previous
studies. In addition, the data collected was used to present
a profile of today's U.S. Army Generals.

Accession For		
NTIS GRA&I	☒	
DTIC TAB	☐	
Unannounced	☐	
Justification		
By		
Distribution/		
Availability Codes		
	Avail and/or	
Dist	Special	
A		

DTIC
COPY
INSPECTED
2

A Comparison and Analysis
of Army Generals and Executives

by

Andrew E. Adams
Captain, United States Army
B.S., Florida Southern College, 1973

and

Mark W. Boyer
Captain, United States Army
B.S., Kent State University, 1974

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1981

Authors: _____

_____

Approved by: _____
                                            Co-Advisor

_____
                                            Co-Advisor

_____
Chairman, Department of Administrative Sciences

_____
Dean of Information and Policy Sciences

3

ABSTRACT

This research continues the study by Leshko and Vosseteig (1975) along with further research conducted by Rowe, Rudeen, and Wenke (1976) in the use of situational stimuli as an aid in identifying and measuring executive capacity. Hypothesis testing was conducted that used capacity indicators which had been previously identified and isolated. Conclusions to the earlier studies claim that an individual's response to the questionnaire can be used to predict the potential success or failure of that individual in an executive role. Whereas prior research deals with executives within the private sector, the data base used in this study was comprised of top military decision makers (07 and above) from within the United States Army. The data from this study was compared with those responses from the previous studies. In addition, the data collected was used to present a profile of today's U.S. Army Generals.

TABLE OF CONTENTS

I. INTRODUCTION

I divide officers into four classes -- The Clever, The
Lazy, The Stupid and The Industrious. Each officer
possesses at least two of these qualities. Those who
are clever and industrious are fitted for the high staff
appointments. Use can also be made of those who are
stupid and lazy. The man who is clever and lazy is fit
for the very highest command. He has the temperament
and the requisite nerves never to deal with all situa-
tions. But whoever is stupid and industrious must be
removed immediately.

> General Kurt von Hammerstein, 1933
> [Ref. 1: pg 223]

It has long been recognized that the development and
selection of good military officers must come from within the
organization. Throughout all service organizations are
personnel with the attributes necessary to be outstanding
officers but we must have a method of finding such individuals.
It is not our purpose nor does it seem very likely that we
will be able to devise a way to select the best military
leader, but early identification of these individuals, with
such attributes, would certainly be welcome.

Anyone who has worked in or studied selection and recruit-
ment would agree that there is an extreme need for sounder
knowledge about selection and identification of future
leaders or executives in organizations.

It has been difficult to agree upon what are the personal
characteristics needed as a condition for good executive or
top military performance. Several reasons make it difficult

9

to find those personal indicators common to successful executives. One reason, the executive or leadership role can be successful in a variety of ways by different types of people. Second, in the military and in the private sector, top positions are by no means homogeneous, and require different types of persons. And thirdly, characteristics which prevail depend on the circumstances at hand.

Often, a considerable amount of training money is expended upon an individual before it is discovered that he/she is unsuited to do the work for which that individual was hired. This expense, and the effort and training required to turn into successful leaders those who lack the intelligence and disposition for controlling others can not be measured, but with today's budgetary restraints, the Army cannot afford the waste. Therefore, an orderly system for early detection of potential leaders is increasingly important.

The authors realize that it is hard to separate the identification of potential leaders from management training and development activities. But early identification and selection would significantly aid in this process.

This research continues the study by Leshko and Vosseteig (1975) along with further research conducted by Rowe, Rudeen, and Wenke (1976) in the use of situational stimuli as an aid in identifying and measuring executive capacity. Hypothesis testing was conducted that used capacity indicators which had been previously identified. Whereas prior research deals

with executives within the private sector, the data base
used in this study was comprised of top military decision
makers (07 and above) from within the United States Army.

A. IMPORTANCE OF EARLY GENERAL OFFICER IDENTIFICATION

The study of military leadership has assumed ever more
critical importance over the last half-century. The rapid
growth in size and complexity of our armed forces' organiza-
tional structures has created a mounting requirement for
increased skill and sophistication on the part of those in
leadership positions. This demand for skilled leaders
creates in turn a need for expanded basic knowledge of the
processes and techniques of leadership and for ways to
identify, educate and develop potential leaders [Ref. 2:
pg 9]. The Army, in particular, recognizes the importance
of preparing officers to be the leaders of tomorrow. They
also are concerned with the development of improved and more
comprehensive techniques to meet the expanded requirements
in the identification and selection of officers to the rank
of general [Ref. 3: pg 15]. This study could be beneficial
and important in the area of early identification of monitor-
ing career progression, saving money in terms of training
dollars or by just being able to identify the right man
for the right job.

One important cog in the wheel of the conventional
military structure is that of having a well defined career

11

progression track. Officers who are looking to move ahead often seek those positions which will put them in the limelight and therefore, enhance their promotion possibilities. There are also other officers who are not so aspiring and are content with accepting whatever assignment comes down the road and in doing what is minimally necessary to achieve the next higher grade. These two views may be thought of as end points on a continuum. There are obviously officers in the midst of the two groups described. There are officers who may be willing enough to accept positions of increased responsibility but are unaware of the proper channels in making their desires known. Many officers may not think it fitting to question the assignment orders they have received from higher headquarters and, therefore, accept them. There are obviously other officers along the continuum in addition to those pictured. The all-embracing problem facing the young career aspirant officer is that only those who get on track early and stay close to the main line, almost continuously, stand a chance of making it to the top. It is important, therefore, that some sort of instrument or system be used in identifying those aspiring, to make it to the top early along in their career. This identification procedure should not be used though, as a tool in strictly fast tracking those officers classified in the aspirant category. Instead its purpose should be that of only

earmarking those officers whose careers should be closely monitored. It is the opinion of the authors and has been noted in several readings that many young officers resign their commissions and leave the military because of job discontentment. Had a few of these individuals been identified as those whose careers should have been monitored, those jobs that are very non-meaningful and not necessarily useful for career progression could be avoided.

There are financial costs involved in carelessly made selection decisions. It would be difficult to estimate the costs not only in training, but other costs such as moves or civilian schooling that are expended before the Army begins to derive the benefits from these expenses. This amount could be a total loss should the officer become unhappy and decide to leave the Army. The cost is even greater if the man is unhappy and decides not to leave or the Army finds the man is not right for the job. Government agencies, including the Army, are pouring millions of dollars into research looking for methods of selecting the right man for the right job [Ref. 4: pg 15]. Consequently, careful planning and investigation should not be spared in the effort to make a correct selection decision.

A lack of fit between an individual and his job is another area that causes problems within the military. Judgments on the shape of people and their jobs are difficult

to make. There may be overemphasis on skills and experience while ignoring the very important factors of personality and individual goals [Ref. 5: pg 137-148]. For a proper fit to occur, an individual should enjoy what he is doing, feel competent at doing it and what he is doing should not upset his moral values. A lack of proper fit can have many consequences, the least of which might be a sense of worthlessness. It can disrupt one's family life and if the fit is extremely loose or goes on for a long period of time, the individual will leave the organization. It is important, therefore, that we attempt to fit officers into the proper positions early on in their careers. Of course, this is not always going to be possible but having the individual earmarked and monitoring his track will help in fitting individuals into the proper positions. The main thrust is having the ability to early identify and select the future leader and then proceed with the optimum development plan to achieve the most cost effective results.

It must be mentioned that even though this study attempts to use a questionnaire test instrument to analyze the way today's Army generals react to given situations, the authors in no way stipulate that this decision process is the correct one or the one the Army wants. To most individuals the Army appears quite stable in structure but it is also a dynamic organization which must keep up with the times not only in

14

technological advancements but also in changes affecting behavioral systems. What is the right decision in a given situation today may not be right in the future. The instrument in this thesis may need to be modified to fit what the Army is looking for in their higher positions.

B. OBJECTIVES

1. Provide an analysis of responses to situational stimuli by top military leadership.

Very limited research has been done in using situational stimuli as a means to assess potential [Ref. 6: pg 49]. Using the information gathering document developed and tested by Leshko and Vosseteig and with additional questions provided by Rowe, Rudeen, and Wenke, the authors of this study have modified the questionnaire for military use. The response data will be analyzed to test associated hypotheses from the previous studies mentioned.

2. To establish a ground level data base on the way today's army general makes decisions based on previously hypothesized capacity indicators. A total of 14 executive capacity indicators will be evaluated which will provide a baseline describing what army generals do.

3. To compare and analyze today's generals with previously tested successful executives in the private sector. A comparison will be made of the response data of those successful executives surveyed by Rowe, Rudeen and Wenke (1976).

15

4. Weigh the use of this instrument in identifying potential leaders. A conclusion reached by Rowe, Rudeen, and Wenke indicated response patterns of executives can be used as a baseline in evaluating potential executives. This same hypothesis will be tested in the military environment.

5. To provide a profile of today's army general. Who is today's army general? Throughout this study we talk of a faceless non-person inhabiting a title. From the survey results, characteristics will be placed together to form a model of the army general.

C. HYPOTHESES

The purpose of this study is to ascertain whether previous research in the use of situational stimuli as an aid in identifying and measuring executive capacity could be applied to the United States Army. Hypothesis testing was conducted on those capacity indicators formally tested. The following additional hypotheses will be tested in this study.

1. There will be no statistical difference in the way today's army general responds to given questions compared with top executives in the private sector in the Rowe, Rudeen, and Wenke study.

2. The response patterns of the generals tested can not be used as a baseline in evaluating potential Army leaders.

D. DESIGN AND ORGANIZATION OF THE THESIS

The introductory chapter of this thesis has focused the reader's attention on the need for sounder knowledge about early selection and identification of future leaders or executives in organizations, and its desired applicability and advantages for its utilization in a military environment.

Chapter II is where the study actually begins. In this chapter the authors will set the stage by reviewing existing literature in the fields of selection, executive potential, leadership and previous studies done using a situational analysis. The current state of selection and identification of future leaders research will be addressed and an evaluation of the literature on the 14 previously identified capacity indicators. Literature will be examined from the private sector, as well as that done for and by the military.

How did the authors approach this study? What test instrument was used? How was the test instrument administered? Answers to these questions and more will be discussed in Chapter III, where a complete analysis of the methodology employed and data gathering techniques used will be presented.

Chapters IV and V bring the study together. Here the results and analysis will be presented along with findings, recommendations, and uses for future studies.

II. THE CONTRIBUTIONS OF RESEARCH

A. INTRODUCTION

This review is not intended to be all-encompassing, but
rather to single out those issues and themes which the authors
feel are congruent in a study of this nature. An attempt has
been made to place into perspective other approaches to the
subject, and to set the stage for viewing the results and
outcomes.

B. METHODS OF EXECUTIVE SELECTION

Much has been written concerning the various methods that
have been applied in an attempt to identify the potential
executive. Actually, *the first step in achieving high
quality and improving retention of military officers is a
method of selection that insures that those who are selected
possess the potential to become effective leaders and managers.*
There are problems though, associated with the selection
process and the various methods employed. On one hand, you
have the numerous complexities, changeability and uniqueness
of the various jobs officers may have, while on the other hand,
one has problems concerning the identification and measurement
techniques relating to those aspects of the candidate officer
which will make the difference between those who succeed and
those who fail. Any method of predicting success or in

18

identifying those assets necessary for success, that shifts
focus on the subject from an exercise in attrition to one of
growth, assignment and job satisfaction would be welcome.
Many methods have been studied and a few will be reviewed
in the next couple of pages. Several appear quite promising.

Early methods in the study of executive selection mainly
dealt with looking at an individual's constitutional and
physical factors. Determinants such as height, weight,
physique, health and appearance were studied and their
relationships as to whether or not an individual would make
it to the top of an organization. The majority of these
studies viewed the above characteristics in already success-
ful individuals and then an attempt was made to establish
them as necessary qualities of a leader. It was felt that if
one had "the right" characteristics then he or she should
be selected for the highest position.

Concerning some of the physical factors it seems that
when height is a significant factor in the achievement of
executive status, it is so as a result of its correlation
with other factors which, in some situations, are signifi-
cant for the assumption of command [Ref. 7: pg 216]. The
general trend of these studies though, is to indicate a low
positive correlation between height and executive potential
[Ref.]. Many of the same facts and conclusions con-
cerning the factor of height apply to weight. Numerous

studies have found that successful leaders and executives
tend to be significantly lighter than non-leaders. Other
studies done by Maslow and later by Katz have found the exact
opposite true in successful people [Ref. 7: pg 216].
Several studies have studied appearance and its relationship
to success. The evidence in most of these studies suggests
a possible positive correlation between appearance and being
chosen for the top job. Concerning health, Bellingrath,
Brown and Wetzel characterize successful leaders by their
having a high rate of energy output [Ref. 8: pg 42]. A
significant finding by Cox indicates that military leaders
in particular are more adept in the areas of physique, energy
output and athletic prowess [Ref. 9: pg 106]. All, in
most of the studies dealing with physical traits, have yielded
very little in the way of generally useful results that could
be used in methods for executive selection. It was believed
by the authors that the population sampled in this study would
be taller and weigh less than their civilian counterparts.
This hypothesis can be somewhat presupposed due to the organi-
zational standards concerning physical fitness and height
standards that were in effect when these individuals entered
the military.

Other studies examined personality and social traits
as a method that could be utilized in selecting the executives.
During the two decades before World War II, it was natural

that extensive effort was devoted to discovering the specific
personal characteristics that distinguished the top man. This
development was perhaps a consequence of the earlier attention
given to the study of great men and perhaps too, a result of
the rapid growth of personality theory [Ref. 10: pg 5]. As
a result of these studies, laundry lists began to appear as
to what traits were necessary to be successful. The Army
even adopted its own list of "leadership traits" that were
taught at the cadet officer level as necessary things in
order to be a good officer.

The results of these studies have had very little success
in establishing a baseline for executive selection. Some
characteristics dominate in many of the studies but the over-
all analysis seems to be that they have failed to find any
consistent pattern of traits which characterize the top
executive. As Chowdlry states in his evaluation of executive
selection through the examination of personality traits:

> There is no significant improvement in our ability to
> predict who will make a better executive and who will
> rise faster in the organization. No procedures
> developed so far have yielded results better than the
> fallible judgment of wise and experienced executives
> [Ref. 11: pg 103].

More recent studies concerning traits and their relation-
ship to military officer selection was done by Mark, Guilford
and Merrifield. The study was to explore the abilities that
were considered important in successful performance of high-
level military personnel. They wanted to determine whether

certain intellectual aptitude and personality factors found

previously in other populations also pertained to the military.

The three also desired to develop a rating scale which would

evaluate officers with respect to the degree they possess

these factors. The system they employed was the use of

aptitude tests along with both peer and superiors' ratings.

The results of their work yielded a few high correlation

factors among all participants dealing with some of the

factors. Little evidence, though, was discovered relating

possession of such factors as a predictor of success. Their

overriding conclusion was that success in the military is a

function of the situation and its requirements on the followers

and their expectations as well as qualities of the leader

[Ref. 12: pg 26].

Current methods employed by the military in selecting

officers for positions of increased responsibility are predi-

cated on the personnel records biography and have no way to

objectively predict the officer's potential to perform in his

next assignment. The Army has long realized the shortcomings

of this method, if it can be called one, and are doing

extensive research in the use of assessment centers as a

method of officer selection. The assessment center concept is

a procedure which uses standardized situational exercises

to evaluate an officer's leadership skills. The exercises

simulate actual on-the-job conditions and are designed to

elicit specific skills required for future assignments. The officer being assessed is confronted with situations that he would face if he were promoted. The evaluation enables trained assessors to develop a profile of the individual's effectiveness in his current grade and potential effectiveness at a higher level. For validity, the assessment concept depends upon four basic assumptions. First, that all assessees are evaluated under similar conditions. Second, that the ratings are the composite evaluations of several assessors. Third, that ratings for a particular behavioral area are obtained from several different situational exercises or tests and fourthly, that assessors are trained to insure complete understanding of assessment center concept and objectives [Ref. 13: pg 15].

The assessment center concept is not new, nor is it revolutionary. Research reports indicate that the German Army used assessment techniques as early as 1911. The British Army has used the assessment process as the criterion for entry into its officer-producing military schools since World War I. During World War II the Office of Strategic Services (OSS) used this technique as a screening process. In 1963 through 1965 an assessment center operated at Fort McClellan, Alabama, for measuring combat skills in a simulated environment [Ref. 14: pg 3]. Several non-military institutions such as IBM, ATT, General Electric and Standard Oil, have

23

found the use of assessment centers a particularly useful method in selecting their future executives [Ref. 15: pg 15].

Thus far, assessment center activities have demonstrated that the technique employed can be successfully implemented within the United States Army. Standardized situational exercises can be developed which elicit behaviors critical to leadership and which enable assessors to discriminate among individuals assessed and to identify strengths and weaknesses [Ref. 16: pg 7]. It is believed by the authors that our instrument can be used as another tool in this assessment process.

Numerous other studies have dealt with methods of executive selection, some concerning the military, many not. Fraser experimented in 1957 employing the group interview method of selecting key personnel. This method had already proved quite useful within British industry. Day, Willemin and Helme, 1971, attempted to use situational exercises in connection with personality tests and applied this in a very scientific manner as a method of channeling officers into appropriate assignments. Meyer and Bertotti have done extensive research in the use of psychological tests as a method in executive selection. They are quick to point out though, that the tests used must be practical to the individuals being tested or very broad in nature and also designed as supplements, not replacement items, for other officer

24

screening methods. Yates and Downey, 1974, researched the
use of associate (peer) ratings as a method of selection among
officers for promotion purposes. Their conclusions were
that peer nominations were found to be administratively
feasible but not well accepted as a method which they (the
participants) would like to see employed.

Supervisory opinion tests, Rorschacks ink blot tests,
Rosenzweig's picture frustration studies, thematic apper-
ception tests and many more have all been researched at one
time or another as to their applicability in the process of
methods dealing with executive selection. It would be a
very strenuous task to list and discuss them all. The
authors' objective was to just provide a brief research
synopsis of material we have reviewed in connection with
methods of executive selection, those that have been researched
in the past and those that might prove useful in the future.
It is hoped that the instrument presented in our study may
prove useful as an additional technique to help identify
tomorrow's military leaders.

C. PREVIOUSLY IDENTIFIED CAPACITY INDICATORS

   1. Desire for Power

      In today's large and complex organizations the effec-
tive performance of an executive requires one to be skilled
at the acquisition and utilization of power. Rowe, Rudeen
and Wenke touched on this subject in their previous study by

evaluating the use of power in the decision making process of successful executives in the private sector. Based on their review of the literature, it was indicated that the desire for power becomes increasingly important with increasing success; but is used less consciously at the top of the hierarchy.

In contrast, more recent literature indicates that as a person gains more formal authority in organizations, the areas in which that person is vulnerable increase and become more complex, rather than reverse. This puts the individual in a highly dependent position. To be able to plan, organize, budget, staff, control, and evaluate the executive needs some control over the many people who they are dependent [Ref. 14]. John P. Kotter maintains that this growing complexity makes it difficult, if not impossible, for executives to achieve their ends either independently or through persuasion and formal authority alone. They increasingly need power to influence other people on whom they are dependent [Ref. 17: pg 125].

Ralph M. Stodgill states that studies of power are concerned with the means whereby, and the extent to which, one can influence others. Power represents but one aspect of role differential and is not synonymous with leadership. The concept leaves unexplained much variance associated with leadership. The advantage in a power situation appears to

reside with the holder of power. For every source of power, however, countermeasures can be utilized by followers to reduce the extent to which they are subject to influence. Thus power implies a relationship in which participants are bound together by interdependency, influence, and exchange. In the absence of mutual obligation that participants will honor, there is no stable basis for the exercise of power [Ref. 8: pg 292-293].

The authors ascertain that top military decision makers' willingness to assume responsibility is motivated by their desire for power. This is not to say that this is the only motivating factor, because it assuredly is not, but it is an essential element as the individual ascends through the organizational hierarchy. The higher the individual in the military organizational hierarchy, the more that individual understands the dynamics of power, and the more that individual has fine tuned the ability to effectively acquire and use power.

2. Rewarding Family Life

Leshko and Vosseteig designed questions within the data gathering instrument to show the private sector executive's capacity for effective family relations. The literature reviewed in the subject area was concerned with the executive's susceptibility to divorce, and the executive's acknowledgement to family responsibilities and work.

27

Early literature in this area maintains that a happy married life is extremely helpful to executive success. There are a number of reasons for its importance. First of all, tensions in the work situation would be disastrously increased if accompanied by tension at home. Moreover, wives can play an effective role in relieving office tension, and a reasonably ambitious woman can help her husband in many ways. Finally, a well-adjusted home is a good clue to a well-adjusted personality, a fact which may prove significant in the selection process [Ref. 18: pg 250].

To succeed, there is no question that a person has to give the job a high priority in his life. Tradeoffs have to be made.

A good number of executives accept the cliché that success always demands a price and that price is usually the deterioration of private life. This cliché does not always reflect reality, however, some executives seem exempt. [Ref. 5: pg 138]. This last statement is further supported in the Leshko and Vosseteig, and Rowe, Rudeen and Wenke results.

The major determinant of work's impact on private life is whether negative emotional feelings aroused at work spill over into family and leisure time. When individuals feel competent and satisfied in their work, not simply contented, but challenged in the right measure by what they

are doing, negative spill over does not exist. Work spills over into private life in two ways: through fatigue and through emotional tension, like worry [Ref. 5: pg 138].

Traditionally, the military family was unique when compared to the private sector. Not so long ago the service man and his family lived in a closed community where the job and family life were interwoven. In the last fifteen years this uniqueness has been altered. Today, the military can not compete with the private sector in pay; even though it has improved, for its elite. The authors maintain that this is an indication of higher professional commitment on the part of the top military decision maker, but a disadvantage to the military family.

3. Ability under Stress

Managers worry, they work too hard; they relax; they take the job home with them; sometimes they crack up; they drink too much; they collapse; they die early [Ref. 19: pg 93]. What is the cause of this, and how do top military decision makers deal with these? Rowe, Rudeen and Wenke analyzed in the test instrument an individual's ability to make decisions under stressful conditions characterized by personal strain, tension or pressure in varying intensities. Their questions were based on the assumption that successful executives openly deal with stress, have a developed means of working under pressure, do not resist organizationally desired change and are very calm and stable amidst stress.

29

Uncertainty is an increasingly frequent fixture of today's world and has a massive impact on the lives of executives [Ref. 5: pg 148]. It was pointed out by Bartolomé and Evans that executives try to reduce unnecessary stress and uncertainty within their organization by acting as a shield guarding their subordinates from happenings in which they have no control. This buffer against stress builds commitment and trust from subordinates, but the executive utilizing this technique pays the price for the cover. This absorbing technique creates an enormous amount of anxiety which causes those symptoms mentioned in the opening paragraph.

The authors' opinion is that in the military, those earlier stated assumptions will apply. Top military decision makers do openly deal with stress and have an individual system for dealing with it. It might be appropriate to mention that in the military the fighting man considers himself to be brave and prepared to face danger. The individual has an uncritical willingness to face danger, whereas in the private sector this characteristic is not as powerful. Drucker says "many executives boast of the tension under which they labor. They consider it a badge of accomplishment." This statement may apply to an even greater extent to the top military decision maker in a peace time environment.

4. Ability to Manage Time

The tempo that an executive needs varies widely according to time, organization, and job. It is frequently important to the executive's effectiveness. In general, the higher the echelon, the lower the tempo needed owing to the greater importance of the decision to be made. Because an executive works in a large variety of situations, he has to be able to speed up and slow down as the circumstances require [Ref. 18: pg 248-249].

Leshko and Vosseteig designed questions within the test instrument to show the capacity of executives to use their time effectively.

Henry Mintzberg noted that chief executive officers moved in a fragmented fashion through a bewildering array of issues on any given day; in fact, fully half of their activities were completed in less than nine minutes. Moreover, he argued that such behavior was probably both appropriate and efficient. The chief executive officer's ability to influence a large number of activities through brief contacts may, in fact, be a highly leveraged use of time [Ref. 20: pg 49-61].

Thomas J. Peters found in his research on some two dozen corporations in the United States and Western Europe, that executives spend most of their time fighting fires and may not come upon the critical issues until late in the game [Ref. 21: pg 164-172].

Colonel Charles F. Kriete, Chaplain, United States
Army, studied the daily schedules of 21 general officers for
a 28-day period. The results showed significant differences
in the way that generals use their time, dependent upon the
position they hold. The results imply that general officer
leadership, unlike that of their civilian counterparts, is
more influenced by position and mission requirements than
personal style [Ref. 22: pg 1-28].

5. Communicative Ability

The dimension, communication, is described by the
frequency with which a leader provides information to members,
seeks information from them, facilitates exchange of informa-
tion, or shows awareness of affairs pertaining to the group
[Ref. 23: pg 5-6].

We can get agreement that everything the executive
does, and most of what he sees is expressed in words. He
speaks, he reads, he writes, and he hears, all in words; the
basic symbol of communication in the work of the executive.
Even the numbers he sees are ultimately translated into
words. If these observations are correct, then verbal
ability, as one of the many aspects of intellectual and mental
ability, is highly important. This is an ability that an
executive generally needs to a great extent and always needs
to some extent [Ref. 18: pg 238-239].

Leshko and Vosseteig developed questions in the test
instrument to show how the executive in the private sector

made effective use of communications. The questions were designed upon the hypotheses that executives are better informed and expand their levels of interests beyond the local environment; are extroverts and gregarious individuals; interact with more people and are exposed to more new ideas than non-successful persons; and that the successful executive is an effective communicator, because he realizes the importance of the timing and of strategy of communicating a decision.

Top military leaders are able to deliver interpersonal feedback, to read nonverbal as well as verbal clues and to utilize informal information networks.

6. Health

Physical vitality and endurance are emphasized in the literature as being extremely important for a successful executive. "Leaders are characterized by a high rate of energy output." [Ref. 9: pg 27] The requirements in a complex organization often place conflicting demands upon the executive within it. Not being in a good state of health can cause people to become discontent, remove the drive necessary to impel them to see new challenges, and stifle the individual ability to lead.

Leshko and Vosseteig tested the hypothesis that successful executives are concerned about their state of health, and attempt to stay healthy.

33

The authors agree that this hypothesis will remain
true in the military, however, there is a compelling force
on the military leader to stay healthy. This force is the
requirement placed upon the individual by organizational
standards.

7. Decision Making Capabilities

The trait which characterizes the executive or top
military decision maker more clearly than others is their
ability to make decisions. They cannot allow themselves to
take the "on the fence" position. If this were to happen,
control would be relinquished to others within the organiza-
tion and their subordinates would become impatient and
worried.

Leshko and Vosseteig used their test instrument to
show an executive's capacity for making decisions.

Two differing approaches to how executives make
decisions are found in the literature. One approach says that
the executive uses the decision making process when confronted
with a decision, and the other says executives are more con-
cerned with the problem at hand, rather than the decision
making process.

Ability to arrive at decisions presumes that facts
and conditions will be considered, that influence, both
conscious and unconscious nature, will lead to a pronounce-
ment of a course of action [Ref. 24: pg 224]. Executives

34

are expected to make decisions which produce favorable out-comes and therefore, discrimination, discernment and discretion are used in the decision process. This judgment not only involves weighing all objective factors, but the executive uses more subtle elements in making the decision, which an observer would find hard to detect. "The executive must develop a degree of intellectual acumen which permits quick decisions that will stand the test of later evidence of accuracy or inaccuracy of foresight." [Ref. 24: pg 224]

The need to be right as much as possible puts pressure on the executive. The more basic the decision, the greater the penalties for being wrong and the greater the difficulty in evaluating the decision. Two characteristics of executives offset the pressure for correct decisions. The first is a surprising incapacity for analyzing their own decision-making behavior, and the second is the adoption of an optimistic, confident posture on the eventful outcome of their decisions [Ref. 25: pg 271].

Executives do not operate merely on hunches, but rather they are men of action intent upon the act rather than the process of deciding. But the result of this attitude is to divert attention from the obstacles and focus it on the consistency of success embodied in the image of decisiveness cultivated by successful executives.

The second characteristic, a wide spread optimism, is accompanied by feeling that a percentage of error is only

human. A more typical view, however, is to consider the decision outcome as a probability [Ref. 25: pg 272].

It is the authors' opinion that time to make a decision, and the health of the organization play a significant role in how executives or top military leaders make decisions. Meticulous judgments, based on thorough analysis and utilization of the decision making process can be impossible because of the limits of time. An executive in a healthy organization has the latitude for error, and the pressure of being right is decreased. On the other hand, an organization which is unhealthy can not afford error in decision making and timing is even more important.

8. Psyche/Status

Because of the increasing democratic class structure of the American office, many management aspirants have the mistaken idea that status is an extremely minor incentive for executives. In actual fact, executives love it, and they have no pious reluctance to admit the fact [Ref. 26: pg 66-67].

Leshko and Vosseteig designed questions to display the reward needs of executives in the private sectors. Their hypotheses were designed to depict that executives have high reward needs other than money, and successful executives tend to feel satisfied doing things that need to be done.

The literature tends to support the aforementioned hypotheses. When the subject of salaries was studied, the

key issue was not the absolute salary, but its relative size after taxes. There was no evidence that the salary had a profound effect on how hard an executive worked.

So what drives a successful executive to work so hard? The authors' search revealed five characteristics or drives most often identified as the reasons executives work so hard: self-expression, sense of contribution, responsibility, prestige and fear.

The executive is so involved in his work that he cannot distinguish between work and play, and derive a satisfaction from doing it.

In the military, the authors contend that money is not an issue for the top military decision maker. Obviously some would prefer to make more, but other motives retain the individual in the organization, many of which were mentioned in the preceding paragraph.

9. Job Security

Leshko and Vosseteig tested one question upon the hypothesis that successful executives fear that the more time they are away from the job, the more their jobs are jeopardized.

Preoccupation with security is a form of fear, and worries about security can take on different forms. It is felt that today, the executive or the military elite, are not worried about losing their jobs. There are, to a certain

degree built-in restrictions against this. On the other hand, the fear of being pigeonholed or being overlooked exists. They are concerned with slipping within the organization or being passed over. If this is true, then rarely does the executive feel secure.

The authors maintain this is true in the military, probably to a greater degree.

10. Mobility

Many executives believe that mobility is desirable and essential for success. For some it has become synonymous with success, but if you ask a mobile executive what he gets out of moving so often, you are likely to get a laundry list of payoffs, many of them intangible and unique [Ref. 27: pg 36].

What causes this mobility? Some believe executives change jobs both within a particular firm and within industry due to critical turning points in their career strategy [Ref. 25: pg 453-455]. The general career strategy is advancement through the hierarchical system and many believe the only way to obtain it is through mobility. Leshko and Vosseteig designed seven questions to measure executive mobility.

To the extent that mobility is an instrument, organizations will have to contend with some managers who are unwilling to stay put very long. This is not an issue of

poor job design or bad management, but rather of realizing that some managers will want to climb the career ladder as quickly as possible just because it is there [Ref. 27: pg 38].

It is impossible to deny that to reach the top one has to move. Most executive careers are proof of that. In the military the movement is greater. "When one looks back over the road traveled by top military officers, one of the things that stands out is how fast the candidate for the top positions must move if he is to come up through the ranks of a large organization and arrive equipped with a sufficient range of experience, and at an age when he will have sufficient time and vitality left to do the job. The bigger the organization, like the Army, and the more diversified, the faster he must move." [Ref. 14: pg 16] This places a premium upon early discovery.

11. Reaction to Conflict

Reaction to conflict was tested by Rowe, Rudeen and Wenke on private sector executives. Their questions were based on the assumption that executives know their strengths and weaknesses, feel strongly about role ambiguity, maintain control of conflict situations, and when forced to choose between competing alternatives in a conflict situation, often involuntarily use direct authority to resolve the conflict.

Conflict is the term used to describe behavior in which two or more persons or organizational units are in

opposition as a result of perceived deprivation from actual
or potential benefits through activities shared with other
persons or groups. Conflict among groups or organizational
units has its base in the presence of competing objectives,
methods, and philosophies, or missions, and in associated
desires for the maintenance of jurisdictions and other con-
trols. Conflict arises when domains are established and
expanded, or when they are defended against erosion or attack.
Conflict is present in the struggle between the status quo
and the forces of change. It is usually not directly or
simply caused for its own sake; it emerges when conditions
are created which affect the perceptions and motivations of
organization members so as to generate dissatisfaction or
anxiety on the part of organization members [Ref. 28: pg 24].

The authors found that ways of facing or reducing
conflict vary, depending upon the source or context.

One alternative in a conflict situation is withdrawal,
or a kind of strategic retreat. However, some conflicts do
not permit retrograde. Another way would be to overcome
conflict through the use of power, persuasiveness, and
authority, but it can be unpleasant for the loser. Conflict
can be resolved through the use of a third party. Blake,
Shepard, and Mouton suggest these conflict resolution
approaches. First, where the parties see the possibilities
for eventful agreement, and where they are both skilled at
gamesmanship and the use of straightforward strategies well

40

understood by both sides, peaceful coexistence can occur. The second approach is through compromise, bargaining and splitting the difference. This is a common approach to conflict. Lastly, is that of problem solving in a conflict resolution technique [Ref. 29: pg 122-145].

It is felt by the authors that at this point something should be said about an executive's or top military decision maker's ability to avoid conflict. It is felt that successful leaders go to great efforts to create harmony within an organization, and try to reduce those things which are incompatible or in conflict with the goal which it is trying to achieve. When conflict does arise, successful executives take that action which will force direction back to the goal of the organization.

It is felt that in the military the approach to conflict resolution most often used by the top is through power, persuasion, and authority.

12. Courage to Commit Resources

As long as chance, change, and competition play a significant part in economic organization, the executive must think in terms of risk involved and act accordingly [Ref. 24: pg 53].

Executives respond differently, especially in states of nature involving subjective probabilities and uncertainty. Much relies on the individual's perception of problems and the identification and assessment of alternatives.

41

Questions tested by Rowe, Rudeen and Wenke were
designed to show an executive's ability or courage in com-
mitting resources under varying degrees of risk or uncer-
tainty. The questions were based upon the hypotheses that
executives are willing to make decisions under risk or un-
certainty and live with the results, are ready and willing
to take risk to achieve organizationally-valued goals, and
welcome change and make many authorization decisions on an
ad hoc basis.

Drucker contends that to try to eliminate risk is
harmful. The bigger the executive's job, the greater the
risk he/she should be taking. The idea is not to try to
eliminate risk,but to take the right risk [Ref. 30: pg 75].

The authors agree with the aforementioned hypotheses,
however, it is felt that in the military the higher the level
of the decision, the more intangible the decision and there-
fore, the more risk is involved.

13. Intuition

Webster's dictionary defines intuition as immediate
apprehension or cognition; power of knowing or the knowledge
obtained without recourse to inference or reasoning; insight;
familiarity; and quick or ready apprehension. Rowe, Rudeen
and Wenke tested the hypothesis that successful executives
often make decisions intuitively.

Much of the mental activity involved in executive
experience is analytical. There is a need, however, for

42

synthesis which goes beyond the mere putting together of the product of analysis bit by bit. This means that some fervor, warmth of perception, intuitive groping, imaginative insight, disregard of conventional restraint, and insatiable search for understanding the creative artist must be present in executive behavior if achievement is to rise above the commonplace [Ref. 24: pg 329].

The school of empiricism insists that all knowledge is derived from experience and that sensory criteria are the ultimate test of truth. The authors believe that intuitive decisions are based on experience, and that the successful executive has the ability to subconsciously recall that experience. To himself and an observer the decision is based on a hunch, or no evidence of the decision making process. It is agreed that top military decision makers will often appear to be making decisions intuitively.

14. Innovativeness

Leshko and Vosseteig tested the ability of successful executives to institute change in organizations and cause the organization to adopt new technology. Much of the literature reviewed focuses on the executive's resistance to change. Very little has been written on innovation as an attitude and practice, especially the executive with innovative attitudes and practices.

Drucker contends that top management is the major
drive for innovation in an organization. Executives use
ideas of the organization as a stimulus to their own vision,
and then they work to make ideas a concern of the entire
organization. They fashion thought and work on the new
into both organizational energy and entrepeneurial discipline
[Ref. 19: pg 158].

Resistance to change is fear of the unknown. The
successful executive sees the unknown as an opportunity, and
is willing to accept the risk involved.

The authors maintain that today's top military
decision makers display a high degree of innovativeness.
This can be seen through the rapid changes in military tech-
nology and the sociological changes which have taken place
over the last two decades.

D. LEADERSHIP LITERATURE

It is felt by the authors that any research dealing with
military decision making would be incomplete if we did not
review the literature in the area of leadership. What is
leadership, what are the various theories concerning leader-
ship and does this all apply to the military and its officers?
Military officers are in a way unique from their civilian
counterparts in the area of leadership. According to military
manuals and other military literature, officers are assumed
to be leaders the moment they are commissioned as officers

[Ref. 31: pg 5]. With this in mind, though, it is still
widely believed that the manifestation of leadership in one
set of circumstances, i.e., the Army, gives a guarantee of
leadership skills readily adaptable to other circumstances.
The authors believe this is not always the case.

The emphasis on leadership as a topic for research
in organizational behavior has been justified by a belief
that leadership was important in organizational functioning
and that if theories of leadership could be developed, the
selection and training of leaders would be improved, with a
consequent increase in organization effectiveness. Systematic
studies of leadership traits within military men were origi-
nated by American military psychologists in World War II
(United States Army, Adjutant General's Office, 1919).
Techniques for studying the emergence of leadership in
unstructured experimental groups were developed by German
military psychologists in World War II (Ansbacher, 1942).
Adaptations and refinements of the German methods were
utilized in officer selection by military psychologists in
the United States (Office of Strategic Services, 1948),
England (Harris, 1949), and Australia (Gibb, 1947, Knowles,
1963). The emergence of two major but radically different
methodologies for the study of leadership is associated with
the problem of selecting military personnel in two different
wars [Ref. 8: pg 203].

What is leadership? There are probably as many
definitions of this term as there are men who have studied it.
Within the Army, Field Manual 22-100 defines leadership as the
art of gaining influence with others without the exercise of
physical force or reliance on authority. It is also stated
another way in the manual as the ability to cause others to
willingly accept specified goals as their own and to work
wholeheartedly for the achievement of those goals [Ref. 32:
pg i]. Our thesis co-advisor, Professor McGonigal, views
leadership as no more than "the application of common sense
and a compassion for people." [McGonigal, 1981] A defini-
tion which the authors feel is one of the best is that of
Pigor:

> Leadership is a concept applied to the personality-
> environment relation to describe the situation when
> a personality is so placed in the environment that
> he will, feeling and insight direct and control others
> in the pursuit of a common cause. [Ref. 33: pg 12]

In spite of the voluminous research on leadership,
the definition and the dimensions of the concept remain
uncertain. One cannot say unquestionably which definition
is right or which is wrong, for they all have merit. What
can be said about leadership is that it is something very
intangible, hard to measure and difficult to describe.

The search for a theory concerning leadership, if
such can be said to exist, has covered many aspects on the
subject and produced a bewildering mass of findings. The

authors agree with Gibb, along with others though, that basic theories of leadership can be classified historically into three categories, the unitary theory, the traits theory and the interaction theory [Ref. 7: pg 267]. Not intending to be repetitive from previous sections, the unitary theory applies to those studies that researched leadership using the great man approach. The hope was to find that peculiarity which all leaders possessed regardless of the situation or geographical location of the leader. It was felt that some quality differentiated the leader from his followers and all one needed to do was to locate and isolate these qualities. Most of the studies were carried out by looking into hereditary backgrounds of great men or by observing the qualities of those able to lead a mass of people. It should be quite obvious that no unitary trait or quality has been found which could be applied to leaders across the board.

The next approach, the traits theory, actually arose from the unitary theory. The belief here was that there did indeed exist a trait, state, or attribute of the leader, or perhaps a set of such traits, which could identify individuals who would become good leaders [Ref. 34: pg 93]. The pattern may be considered to vary from the leader in one situation to a leader in another but the basis of leadership was still to be found in the personality [Ref. 7: pg 267]. What could be concluded from such studies was that personality traits, when considered singularly, held little predictive significance

but when groups of characteristics were combined they tended

to be helpful in differentiating leaders from followers and

effective from ineffective leaders. It was also discovered

that just because an individual has the necessary traits

does not mean that he will lead and that a leader in one

siutation may not be the leader given another situation.

Perhaps a quote from Stogdill can best be used to sum of the

studies concerning the trait theory and lead us into the

next approach:

> A person does not become a leader by virtue of the
> possession of some combination of traits, but the
> pattern of personal characteristics of the leader must
> bear some relevant relationship to the characteristics,
> activities and goals of the followers. Thus leadership
> must be conceived in terms of the interaction of varia-
> bles which are in constant flux and change. The factor
> of change is especially characteristic of the situation.
> It becomes clear that an adequate analysis of leader-
> ship involves not only a study of leaders, but also of
> situations. [Ref. 8: pg 64]

Stodgill's statement plus additional research

demonstrated the strong effects of situational factors on

leadership phenomena. The interactional theory or approach

to leadership recognizes the importance of both situational

and personal determinants of leadership [Ref. 34: pg 94].

In addition, though, the interaction theory includes other

variables such as the followers with their attitudes, needs

and problems, the group itself, as regards both structure

of interpersonal relations and syntality characteristics.

Furthermore, the theory takes into account those studies that

look into the perception of the leader by others as well as himself along with the leader's perception of others and the shared understanding by all of the group and situation [Ref. 8: pg 268]. Blake and Mouton's managerial grid, Fielder's contingency model, McGregor's theory X and theory Y and others would all fall under the interaction theory. The authors believe that the interaction theory is essential in any study in leadership. Leadership is an interaction happening and this theory should be utilized as its frame-work. In general, it could be said that leadership is a function of personality and the situation one may find himself in and the interaction between the two [Ref. 8: pg 273].

The preceding literature review was not intended to be all-encompassing but was only to provide the reader with an overview of those theories concerning the study of leadership. Leadership theories have progressed from those looking at traits among great men to those of present time that view leadership as an interaction phenomenon in which one must consider many features. Not only must we view the action of the leader but also those of the followers and how they all can adjust and change in accordance with the situation.

III. METHODOLOGY

A. BACKGROUND

1. Why

Previous research by Leshko and Vosseteig (1975) along with further research conducted by Rowe, Rudeen, and Wenke (1976) provide the foundation for this study. The 1975 study (An Approach to the Identification of the Potential Executive) concluded that executive performance may be studied utilizing the situational approach, while the 1976 study (Executive Selection: A Method for Identifying the Potential Executive) concluded that situational stimuli in the form of a questionnaire can be employed to identify potential executives. The authors could find no evidence of a study of this nature being aimed at top military decision makers. With this as background and after collaboration with our thesis advisors, the authors felt a desire to examine the use of the previously tested instrument among active duty military personnel. We felt that not only would a test of the instrument within a military environment prove beneficial, but also that the military responses we received could then be compared to the civilian responses previously analyzed. Since both authors are currently in the military, it was thought that this comparison would be personally interesting as well as beneficial to the study of leadership in organizations.

50

2. Test Instrument Capacity Indicators and
   Associated Hypothesis

The test instrument was designed to measure top
military decision maker (07 and above) capacity indicators
utilizing the situational response method. The data
gathering document is included as Appendix A.

The questions in all sections of the instrument were
designed to test how an individual would respond to situational
stimuli; and, as such, are indicators of capacity. Sections I
and II were designed by Leshko and Vosseteig (1975), while
Section III was designed by Rowe, Rudeen and Wenke (1976).

The following provide the question numbers along
with the hypothesis upon which the questions were founded
for each capacity indicator.

a. Desire for Power

Questions 58 and 60-65 were designed to display
the individual's desire for power. The questions were
developed to evaluate the respondent's use of power in the
decision making process.

Question 58.   A. I feel that accepted plans should
                    generally represent the ideas of
                    my subordinates.

        OR B.   I expect subordinates to carry out plans
                I have prepared.

Question 60.   A. I believe that firm discipline is
                    a most important element to keep
                    work moving.

        OR B.   Firm discipline should only be
                enforced occasionally, because it
                often does more harm than good.

51

Question 61. A. I am constantly concerned with high
                  standards of performance and encourage
                  subordinates to reach these standards.

          OR B. When a subordinate fails to perform I
                  let him know of the failure in a firm
                  and reasoned manner.

Question 62. A. I think that subordinates should be able
                  to overcome difficulties in the way of
                  achievement themselves.

          OR B. When alternatives are described to me
                  I am not long in indicating the course
                  of action I prefer.

Question 63. A. When I make a decision, I take the
                  additional step of persuading my sub-
                  ordinates to accept it.

          OR B. I believe that subordinates should not
                  be too discouraged by setbacks in the
                  job, but rather should be able to clear
                  blockages themselves.

Question 64. A. In the long run, I will fire a man I
                  consider to be unmanageable.

          OR B. I discourage arguments which upset the
                  harmony amongst subordinates.

Question 65. A. I reward good work and feel that
                  punishment for non-performance has
                  limited use.

          OR B. When I discipline a subordinate I am
                  definite in letting him know what has
                  done wrong.

Hypothesis: The desire for power becomes increasingly
             important with increasing success; but is
             used less consciously at the top of the
             organizational hierarchy [Ref. 35: pg 153].

    b. Rewarding Family Life

        Questions 12, 13, and 43 in the instrument are

intended to show the capacity for effective family relations.

52

Question 12. Select the most appropriate situation that describes your marital status.
(1) Divorced (2) Divorced and remarried
(3) Married (4) Single
(5) Widow/Widower.

Question 13. How many times have you been married?

Hypothesis: Questions 12 and 13 are based upon the hypothesis that successful executives have high divorce rates [Refs. 36: pg 58-66; 37: pg 120, 122, 159-160, 170-172, 279; 38: pg 122-123].

Question 43. As you reflect on your career, judge the present, and postulate about the future regarding the relationship with your family, family responsibilities and demands of your present position, how would you best describe the way in which the relationship exists or developed?

A. Family responsibilities were/are not neglected since a mutual bond of understanding developed as you proceeded through your career, wherein the family was/is supportive of your professional goals?

B. Your family has/did not place you in a position wherein you had to choose between family or professional goals.

C. Family obligations occasionally have taken a secondary position if your professional goals and requirements of your job were to be attained. However, you attempted to make it up to the family whenever the occasion(s) allowed.

D. You attempted to make a compromise decision between family and job, but rarely sacrificed the family.

E. Sometimes, demands of the job, i.e., time sensitive issues, demanded that you put more hours on the job than you would like.

53

Hypothesis: Question 43 is founded upon the hypothesis that successful executives acknowledge family responsibility and work toward fulfilling it [Ref. 39: pg 162].

    c. Ability under Stress

Questions 48, 53, and 57 in the instrument were designed to display an individual's ability to make decisions under stressful conditions characterized by personal strain, tension or pressure in varying intensities.

Question 48. You have decided to fire an officer who is a personal friend. Which best describes what you would do?

    A. Discuss the matter with him over the telephone.

    B. Delegate the act of termination to someone else.

    C. Delay notification until an opportune time.

    D. Write a memo specifying the termination and its reasons.

    E. Discuss the matter with him directly.

Hypothesis: Question 48 is based upon the assumption that successful executives openly deal with stress [Refs. 40: pg 272; 41: pg 183-185].

Question 53. Indicate the one best description of your actions while working under tight time constraints for a considerable period.

    A. You delegate part of your tasks.

    B. You continually seek additional tasks to be performed.

    C. You set aside part of the work for another time.

D. You set up a priority for the tasks, then follow the priority.

E. You are still open to ideas for additional tasks.

Hypothesis: Question 53 is founded upon the hypothesis that successful executives have developed a means of working under pressure [Refs. 42: pg 278; 43: pg 632-638].

Question 57. You and several others have been competing for a top military position, which you highly desired and confidently expected to receive. You were just informed that a young "tiger" has been selected for the position, and you consider him to be less competent than you. You have received a memo from the retiring individual in this position to bring the new officer up to speed. What would you do?

A. Resign.

B. Give token conformance and let the new officer meet the challenge on his own.

C. Accept the assignment.

D. Take time off to think about the situation.

E. Accept the assignment, while looking for a position in another organization.

Hypothesis: Question 57 tests the hypothesis that successful executives do not resist organizationally desired change; and are calm and stable amidst stress [Refs. 44: pg 29; 40: pg 272].

d. Ability to Manage Time

Questions 36-38 in the instrument are intended to show the capacity of executives to use their time effectively.

Question 36. How do you feel about the time you have to do your work?

A. Have time for everything without feeling pushed.

B. Wish you had a little more time to plan and to think.

C. Necessary to keep pushing to get everything done.

D. Very hard to do what is expected of you in the time available.

E. Never seem to have enough time to do everything.

Hypothesis: Question 36 is based upon the hypothesis that successful executives utilize time efficiently and are able to make time available [Refs. 39: pg 155-165; 45: pg 52].

Question 37. With respect to the amount of time you spend at "work":

A. You do not view your position as having fixed working hours.

B. You consider yourself as a professional that will give whatever amount of time is required, at the time, to accomplish the present undertaking.

C. As a general rule, you accomplish at least as much or more work outside the office than while working at the office.

D. You simply feel that working hours are for "others" and you give whatever time is required to accomplish a task and work at it until it is completed.

E. You try not to allow your outside personal interests to cause you to mismanage your time.

Question 38. Of the situations given, which of these best describes your work routine?

A. You have time in your daily routine to spend time on the unexpected.

B. As a general rule, your daily schedule is very heavy.

C. If it were not for your subordinates taking
    up a good part of your time, you would have
    more than enough time to expand your involve-
    ment in the organization.

D. You have no difficulty with the management
    of your time since you set a fixed and
    precise daily schedule, allowing time for
    your seniors, subordinates, and whatever
    is left belongs to you.

E. You are concerned with the amount of time
    you have to spend at the office, because
    you feel your superiors interpret this
    as an indicator of your ineffectiveness.

Hypothesis: Questions 37 and 38 are founded upon the
             hypothesis that successful executives have
             high energy levels, do not consider them-
             selves as having regular working hours, and
             use their time to great advantage [Refs. 46:
             pg 88-89; 47: pg 31-37].

e. Communicative Ability

    Questions 22-24 and 31-32 in the instrument are

intended to show the effective use of communication.

Question 22. Indicate the number of work-related organizations
              to which you hold current membership, i.e.,
              U.U.S.A., Airborne Association, ...

A. 0   D. 5-6

B. 1-2   E. More than the above

C. 3-4

Hypothesis: Question 22 is based upon the hypothesis that
             successful executives are better informed
             and expand their levels of interest beyond
             the local environment [Ref. 48: pg 34].

Question 23: How many new friends have you made in the past
              year?

A. No need to make new friends.

B. 1-2

57

C. 3-5

D. 6 or more.

E. Cannot remember exactly.

Hypothesis: Question 23 is founded upon the hypothesis that successful executives are extroverts and gregarious individuals [Ref. 48: pg 33-34].

Question 24. On the average, how many people to you see daily? (Excluding your immediate staff.)

A. 0-4

B. 5-8

C. 9-12

D. 12-16

E. 16 or more

Hypothesis: Question 24 is based upon the hypothesis that executives interact with more people and are exposed to more new ideas than non-successful people [Ref. 49: pg 307, 320-338].

Question 31. When information concerning major decisions are made, you:

A. Recognize, among other things, that upward communications have little or no value to the management of the organization.

B. Acknowledge that an important decision about decisions is when to communicate them, if at all.

C. Insist that a decision is communicated in a language that will not antagonize its receptiveness.

D. Recognize that some restrictions may improve organizational effectiveness.

E. Insist that every decision be communicated in a language that leaves no doubt to the intent or spirit of the decision.

Hypothesis: Question 31 is founded upon the hypothesis that a successful executive is an effective communicator, because he realizes the importance of the timing of and strategy of communicating a decision [Refs. 50: pg 536-555; 49: pg 296-316].

Question 32. Indicate the total number of journals, magazines, and newspapers which you regularly read.

    A. 1-2

    B. 3-4

    C. 5-6

    D. 7-8

    E. 9 or more

Hypothesis: Question 32 is founded upon the hypothesis that executives are well read, and professionally current (sic) through consumption of mass media [Ref. 48: pg 22-24].

    f. Health

Question 47 in the instrument is to display the executive's belief in his state of health.

Question 47. How good is your health?

    A. Poor -- need rest and/or medical treatment to attack the rigorous daily business activity.

    B. Based upon your judgment and substantiated by your physician's evaluation, you are in good health for your age.

    C. Based upon your judgment and supported by your physician's evaluation, you are in better health than others of your age.

    D. Fair -- you recognize the need to keep yourself physically toned up, but your demanding schedule has precluded you from adhering to a set exercise schedule.

E. Perfect -- can drive hard on any job,
    night or day.

Hypothesis: The question was based upon the hypothesis
             that successful executives are concerned about
             their state of health, and attempt to stay
             healthy [Ref. 51: pg 123].

    g. Decision Making Capabilities

        Questions 25, 39, 40, 41, and 42 in the
instrument are intended to show the capacity for making
effective decisions.

Question 25. Which of the following best describes what you
              usually do in making important decisions?

    A. Make the decision and inform your boss later.

    B. Make the decision as if it were a routine
        matter.

    C. Put the problem up to those affected by
        the decision.

    D. Decision-making is not my responsibility.

    E. Take time to check with your boss.

Hypothesis: Question 25 is based upon the hypothesis that
             successful executives are more concerned with
             solving the problem at hand than about the
             decision making process [Ref. 25: pg 270-271].

Question 39. You are about to propose a new policy which
              you feel is good for the organization. You
              intuitively believe, however, that you will
              have difficulty convincing certain segments of
              the organization. You are further aware that
              unless you receive almost across-the-board
              concurrence, it will be difficult to convince
              your boss to implement the policy. How would
              you go about "seeing to it" that your policy
              is accepted?

    A. Work around the opposition, by going
        directly to your superiors and attempt to
        convince them of the need for your proposed
        policy.

B. Determine who your supporters are and seek their assistance to favorably impress the opposition.

C. Specifically, identify those individuals who are opposed and attempt to convince them individually.

D. Ignore the opposition and continue with your new policy changes.

E. Postpone introduction of the policy change and wait for better timing.

Hypothesis: Question 39 is founded upon the hypothesis that a successful executive is a strategist and uses his knowledge of people for mutual benefit of all concerned [Ref. 25: pg 450-455].

Question 40. As a decision-maker:

A. You accept success and failure equally.

B. When you have failed, you have accepted the consequences and continue on as before.

C. When you fail, you accept the consequences and will analyze the causative factors thereto. Such a setback will not deter your future efforts.

D. Your aim is to always succeed no matter what procedures or methods must be employed to accomplish your objectives.

E. You are successful because you thoroughly investigate the parameters surrounding the decision about to be made.

Hypothesis: Question 40 is based upon the hypothesis that executives have deep feelings of satisfaction directly related to accomplishment and achievement [Refs. 25: pg 39; 52: pg 47-57].

Question 41. Assume that you are considering an offer for an extremely important and visible project. However, you consider the best among them to be a "maverick" with respect to his management/ leadership style. If you decide on selecting the "maverick" would you:

A. Insist that his management/leadership style conform to present organization policies?

B. Modify the organization to adjust to his management/leadership style?

C. Prefer to allow him to operate as he pleases so long as his performance results are highly satisfactory?

D. Prefer to allow him to operate within his style, but at the appropriate time tactfully remind him that the organization policies are sound and will prove beneficial to him in the long run?

E. You would not select the "maverick."

Hypothesis: Question 41 is founded upon the hypothesis that executives have a unique ability to pick people for situational needs [Ref. 53: pg 115-122].

Question 42. If you have just been promoted two levels above your present position, you would function at this new level:

A. By proceeding cautiously before making decisions.

B. By waiting to gain confidence and with additional experience make decisions faster than when initially assigned.

C. With no delay in decision-making because earlier training and experience adequately prepared you for this increased responsibility.

D. Because in the past when assigned to a new or unfamiliar area, you had no difficulty in commanding the new job and therefore would anticipate no delay in decision-making now.

E. By growing into the job gradually because of the scope of the position.

Hypothesis: Question 42 is based upon the hypothesis that executives will quickly adapt to new environmental responsibilities and only minor delays in decisions will occur [Ref. 54: pg 50-59, 63-67].

h. Psyche/Status

Questions 33-35 and 44 of the instrument are designed to exhibit the reward needs of the individual.

Question 33. Would you work at your present job for a lesser salary?

    A. Yes

    B. No

Question 34. If Yes, by how much less?

A.	$ 2,000	D.	$15,000
B.	5,000	E.	20,000
C.	10,000		

Question 35. If No, why not?

    A. Money is very important to you.

    B. You are worth what you are being paid.

    C. For your unique skills, you will not work for less than your present salary.

    D. Money is not a direct concern to you, but it is important to your family.

    E. Present earning power is necessary to provide a portfolio for future security.

Hypothesis: Questions 33-35 are based upon the hypothesis that successful executives have high reward needs, other than money [Ref. 39: pg 159-160].

Question 44. In a position that you feel is not exactly what you want:

    A. You do whatever is required and receive what you believe to be only minimal personal or professional satisfaction from the results of your efforts.

B. You consider the results of your efforts
    to be negligible and, in fact, believe
    your efforts to be "dog work."

C. You consider your efforts to be professionally
    and personally rewarding even though you
    are not completely happy with your present
    position.

D. You have, in retrospect, almost always
    derived personal satisfaction from your
    job regardless of your personal feelings
    toward the assignments.

E. You do what is required, knowing or hoping
    that the present assignment or occupation
    is only a means to an end.

Hypothesis: Question 44 is based upon the hypothesis that
             successful executives tend to feel satisfied
             doing things that have to be done [Ref. 25:
             pg. 96, 110].

    i. Job Security

        Question 46 of the instrument is to display the

fear of losing one's position.

Question 46. When you take leave:

A. You find it is most beneficial to take one
    long leave as opposed to several short
    leaves.

B. You fit your leave schedule into what the
    organization will allow you to take.

C. You find it best to schedule your leave
    with the needs and desires of your family.

D. You do not take long leaves (more than two
    weeks) because you recognize that you will
    have to work twice as hard to catch up on
    your work when you return.

E. You take leaves only for reasons of health.

Hypothesis: The question is founded upon the hypothesis that
             successful executives fear that the more time

they are away from the job, the more their
jobs are jeopardized [Ref. 39: pg 77].

j. Mobility

Questions 9, 16, 17, 19, 20, 21, and 45 of the
instrument are intended to show executive development.

Question 9. Length of time with present organization? (YEARS)

Question 16. How many times have you relocated in your
career thus far?

    (1) 0-5   (4) 15-20

    (2) 5-10   (5) Over 20

    (3) 10-15

Question 17. How long have you been in the Military? (YEARS)

Hypothesis: Questions 9, 16, and 17 are based upon the
hypothesis that successful executives move around
as they move upward [Ref. 46: pg 8].

Question 19. Have you changed your religious preference?

    (1) Yes   (2) No

Question 20. If yes, how many times?

Hypothesis: Questions 19 and 20 are based upon the hypothesis
that successful executives change their religious
denomination as they ascend the corporate ladder
[Refs. 39: pg 405-422; 38: pg 46-49; 37: pg 194-
206].

Question 21. What is/was your father's occupation? If
deceased or retired, please indicate last
occupation. _____

Hypothesis: Question 21 is founded upon the hypothesis that
successful executives who are children of proven
executives have a higher incidence of becoming
successful executives themselves [Ref. 46:
pg 6-9].

Question 45. You accept a specific assignment:

A. Thinking or knowing that it would be only a temporary assignment, carrying with it a promise or possibility that a better position would be available in a reasonable time.

B. Realizing that it was exactly what you wanted to do and had no desire for higher levels of aspiration.

C. Because of your specific or unique skills that were desired by the organization, who was willing to award you commensurate with your proven abilities.

D. Because of your unique skills that were desired by the organization but you also set your remuneration specific demands.

E. Because there were no other positions available or opportunities that suited you.

Hypothesis: Question 45 is founded upon the hypothesis that successful executives are sought after and set their own salary schedule [Refs. 50: pg 417-436; 54: pg 96].

k. Reaction to Conflict

Questions 49, 50 and 56 were designed to exhibit

the individual's ability to handle conflict situations.

Question 49. Select the one situation which causes you the most conflict:

A. Your family accuses you of being married to your job, and demands more time with you.

B. You have been directed to reorganize your activity to a mode you objected to in the past.

C. Your organization expects you to violate your personal ethics.

66

D. Your subordinate directly countermands your directions, however, his actions have led to increased effectiveness.

E. You have a difference of opinion with your next higher command on the goals and objectives of the organization you head.

Hypothesis: Question 49 is based on the assumption that executives know their strengths and weaknesses and feel strongly about role ambiguity [Refs. 55: pg 217; 40: pg 273].

Question 50. Your staff of ten members disagrees with you on an issue in which you strongly believe. What is the highest level of opposition that you would tolerate before yielding to the staff?

	FOR		AGAINST
A.	0	-	10
B.	2	-	8
C.	3	-	7
D.	4	-	6
E.	5	-	5

F. Would not yield no matter what the opposition.

Hypothesis: Question 50 is based upon the hypothesis that successful executives maintain control of conflicting situations [Refs. 44: pg 29; 41: pg 186].

Question 56. It has been brought to your attention that two of your key people have had a fight. The conflict continues to adversely affect the performance of their departments. What would you do?

A. Attempt to resolve the issue with each individual separately.

B. Do not get involved; let them resolve the issue themselves.

C. Call a conference to identify issues and resolve differences.

D. Direct them to drop the issue and get on with business.

E. Listen to the case, make judgment, and take appropriate action.

Hypothesis: Question 56 is founded upon the hypothesis that successful executives, when forced to choose between competing alternatives in a conflict situation, often involuntarily use direct authority to resolve the conflict [Refs. 20: pg 60; 56: pg 47-103].

1. Courage to Commit Resources

Questions 51, 52 and 55 were designed to show an individual's ability or courage in committing resources under varying degrees of risk or uncertainty.

Question 51. Assume that for some reason a very close friend is forced to leave the service. Some of the organizations that he has contacted are new and although their future success is uncertain, they offer potential salaries above that which he is now receiving. Indicate which company you would advise your friend to join.

	CHANCES FOR COMPANY SUCCESS	PROSPECTIVE SALARY INCREASE
A.	2 in 10	200%
B.	4 in 10	100%
C.	6 in 10	50%
D.	8 in 10	25%
E.	Survival Guaranteed	0%

Hypothesis: Question 51 is based upon the hypothesis that successful executives are willing to make decisions under risk and live with the results [Refs. 43: pg 637-635; 44: pg 31].

Question 52. You are project manager for a new weapon system.
The time and political mood is right for pro-
curement of this system but you know that
another more advanced system is also being
developed. There is a high probability that
the political mood will shift before develop-
ment of the new system. What do you do?

A. Do more research before making a decision.

B. Limit buying of new system until more is
learned on advanced system.

C. Pursue the more advanced system no further.

D. Invest more effort in the more advanced
system.

E. Transfer the decision on what to do to
your boss.

Hypothesis: Question 52 is founded upon the hypothesis that
successful executives are ready and willing to
take risks to achieve organizationally-valued
goals [Ref. 57: pg 108].

Question 55. Imagine you manage a medium sized construction
firm and recently learned of a new building
material which is used extensively in Europe
but has never been adopted in the United States.
The building material appears to have several
advantages in terms of substantial cost reduc-
tion, superior insulation qualities, and relative
ease in construction as compared to its counter-
part in the United States.

After a thorough investigation, one of your
engineers obtained extensive and reliable infor-
mation on the characteristics, costs, and advan-
tages of the new material. Further, your
company could easily obtain exclusive manufac-
turing rights for use in the United States.

Indicate which of the following would best
describe your approach to the building material.

A. Utilize the new idea in the firm's next
major building project so as to take advan-
tage of the substantial cost savings.

69

B. Use the building material in one of the
   firm's small, local building projects
   so as to test its acceptance.

C. Construct a non-commercial prototype.

D. Engage the services of an independent
   consultant.

E. Wait until the building material has
   received considerable commercial
   application in the United States.

Hypothesis: Question 55 is founded upon the hypothesis
that successful executives welcome change and
make many authorization decisions on an ad hoc
basis [Refs. 20: pg 58; 56: pg 54].

    m. Intuition

Question 54 was designed to point out an

individual's capacity for making decisions intuitively.

Question 54. How frequently do you feel that you have been
right when faced with making decisions which
are not backed with factual material?

A. Less than 50% of the time.

B. 50 - 60% of the time.

C. 60 - 70% of the time.

D. 70 - 80% of the time.

E. Greater than 80% of the time.

Hypothesis: Question 54 is founded upon the hypothesis that
executives often make decisions intuitively
[Refs. 58: pg 51; 20: pg 53].

    n. Innovativeness

Questions 26-30 are designed to display the

ability to institute change in an organization, and cause

the organization to adopt new technology.

Question 26. Indicate which combination of words, when placed
in the following sentence, would most accurately
describe you:

You hear about new work-related developments
_____ most of your colleagues.

    A. considerably before

    B. sooner than

    C. at about the same time as

    D. later than

    E. sometime after

Hypothesis: Question 26 is based upon the hypothesis that
effective executives become aware of work-
related developments before less competent
ones [Ref. 48: pg 16].

Question 27. Indicate the frequency with which your
subordinates, peers, and/or superiors came
to you in the past month for work-related
information which was not a function of your
position.

    A. 1 - 3

    B. 4 - 7

    C. 8 - 11

    D. 12 - 16

    E. 17 or more

Hypothesis: Question 27 is based upon the hypothesis that
successful executives are opinion leaders and
that others have confidence in their judgment
[Ref. 48: pg 19-21].

Question 28. In the past year, how many non-routine, work-
related projects have been completed for which
you supplied the original idea?

    A. 0

    B. 4 - 7

C. 3 - 4

D. 5 - 6

E. 7 or more

Hypothesis: Question 28 is founded upon the hypothesis that successful executives are innovators, dynamic, and modify organizations to accommodate change [Ref. 48: pg 33].

Question 29. Which of the following do you tend to rely upon most heavily as a source of initial information for work-related projects and/or problems?

A. Literature - books, manuals, dissertations, and other items which are not published on a regular basis.

B. Vendors - representatives of, or documentation generated by suppliers or potential suppliers.

C. Personal Experience - ideas which were previously used by yourself in similar situations and recalled directly by memory.

D. Staff - selected members of your staff who are not assigned directly to the project being considered.

E. External Sources - sources which do not fall into any one of the categories.

Hypothesis: Question 29 is based upon the hypothesis that the higher the executive is within the executive circles, the more he/she tends to rely on external sources [Ref. 49: pg 361-380].

3. Test Instrument Modification

The test instrument used in the two previous studies was designed for a civilian/government service executive. It was felt by the authors that changes needed to be made before the instrument could be distributed to our defined population. The changes made, though, were basically

72

cosmetic in nature, in that we did not want to destroy the
spirit of the question being asked nor the capacity indicator
it applied to.

After such changes were made the questionnaire was
proofed by our co-advisors for correctness and applicability.
It was felt that since the changes did not alter the original
document to any great extent, a pre-test was unnecessary
in that the instrument had already been administered to over
1,000 individuals.

B. DEFINED POPULATION

The study by Leshko and Vosseteig along with that of
Rowe, Rudeen and Wenke solicited responses from top civilian
corporation executives along with responses from upper end
(GS-13 and above) government service employees. As mentioned
previously, the instrument had not to date been administered
to active duty military personnel. Due to a previous
administrative decision concerning use of the instrument
within the United States Navy Admiral population, this group
of respondents was not considered. Also excluded, because
of lack of information concerning availability of addresses,
were the generals within the Air Force. The authors decided
because of availability of needed information and our member-
ship in this service branch, to direct the questionnaire to
all active duty Army Generals along with those full Colonels
who have been selected for a one-star promotion. It was

felt that this caliber of individual would closely correlate to those previously tested and would, therefore, add reliability for use of the document as a tool in measuring executive capacity and using a situational approach to do such.

The addresses of respondents were acquired from the document that was prepared by the General Officer Management Office, ODCSPER, U.S. Army, Washington, D.C.

C. DATA GATHERING

1. Mailing the Questionnaire

Every individual in the defined population was mailed a questionnaire packet. Included in the packet was a personalized typed letter, Appendix A, along with a return, pre-addressed envelope. A total of 495 questionnaire packets were mailed to the population's current duty station address. The mailing addresses were hand written on each envelope. This procedure was followed by the authors to give the instrument a more personalized touch and not have the packet appear to be another routine mail document. On 7 July 1981, a total of 126 envelopes were mailed and on 9 July 1981, the remainder, 369, were put into the postal system.

2. Return of the Questionnaire

The next few pages give a synopsis of dates, numbers and percentages of questionnaires that were returned.

Included are graphic displays of this information which depict daily return rates, weekly returns and a percentage of returns by day. Of the 495 packets that were mailed a final total of 340 have been accounted for.

It is the authors' opinion that the 67% return rate of completed questionnaires was high. Our initial feeling was that due to the positions and caliber of the defined population the response rate would be less. Our thesis advisors, on the other hand, anticipated such a high return percentage.

Several things can account for this high return rate. The authors spent a great deal of time debating what methods could be employed that would attract the attention of the defined population. The title Top Military Decision Making was decided on in conjunction with our thesis advisors as one which would grasp the attention of the would-be respondent as opposed to the previously used title. The color of the cover page along with the sketch was used strictly as an attention getting device. The fact that many questionnaires were returned with the cover removed would seem to indicate its attention getting effectiveness. This continues to indicate that the military tends to respond in greater percentages than do the civilian counterparts when presented with a data gathering document.

D. CODING OF THE INSTRUMENT

The documentation of the programming used by the authors was done utilizing the statistical package for the Social Sciences, SPSS. A summary of the coding used in this analysis is provided as Appendix B.

WEEKLY RETURNS

126 Documents Mailed 7 July
369 Documents Mailed 9 July

77

DAILY RETURNS

NUMBER RETURNED

45 40 35 30 25 20 15 10 5

7/16/81 7/17/81 7/20/81 7/21/81 7/22/81 7/23/81 7/24/81 7/27/81 7/28/81 7/29/81 7/30/81 7/31/81 8/3/81 8/4/81 8/5/81 8/6/81 8/7/81 8/10/81 8/11/81 8/12/81 8/13/81 8/14/81 8/17/81 8/18/81 8/19/81 8/24/81
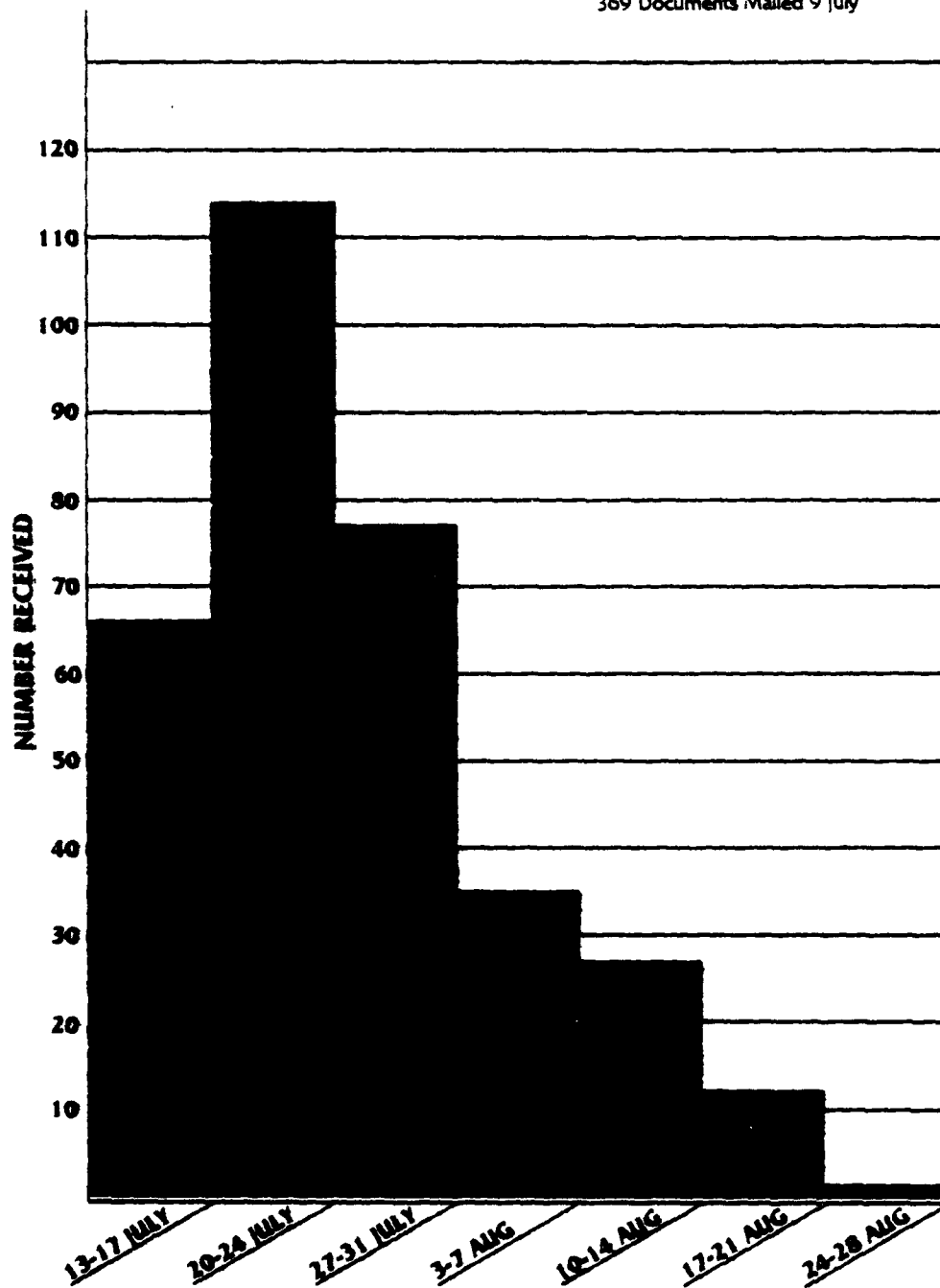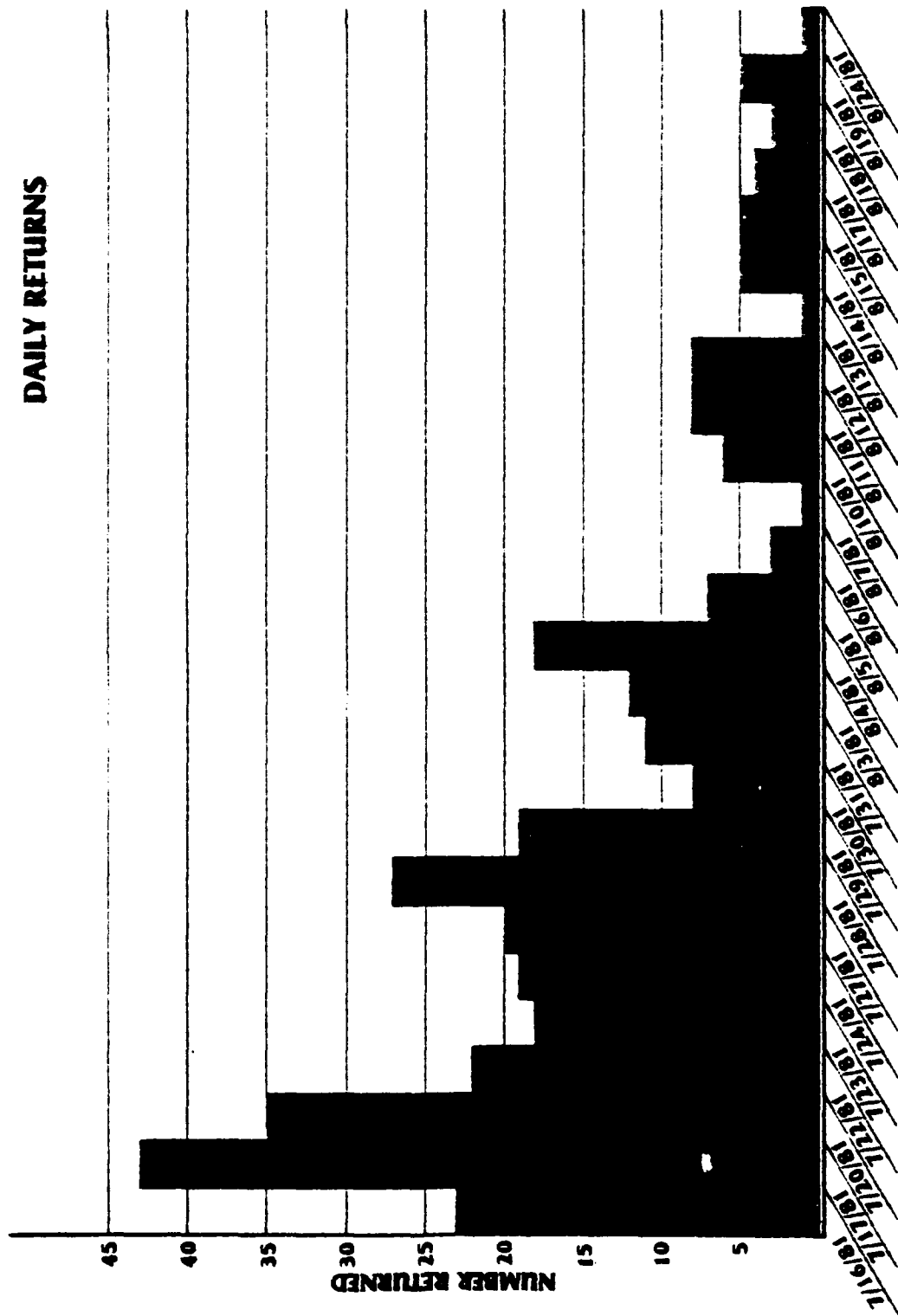
DAILY PERCENTAGE RETURNS

PERCENTAGE RECEIVED

.70 .65 .60 .55 .50 .45 .40 .35 .30 .25 .20 .15 .10 .05

7/16/81 7/17/81 7/20/81 7/22/81 7/23/81 7/24/81 7/27/81 7/28/81 7/29/81 7/30/81 7/31/81 8/3/81 8/4/81 8/5/81 8/6/81 8/7/81 8/10/81 8/11/81 8/12/81 8/13/81 8/14/81 8/15/81 8/17/81 8/18/81 8/19/81 8/24/81

79
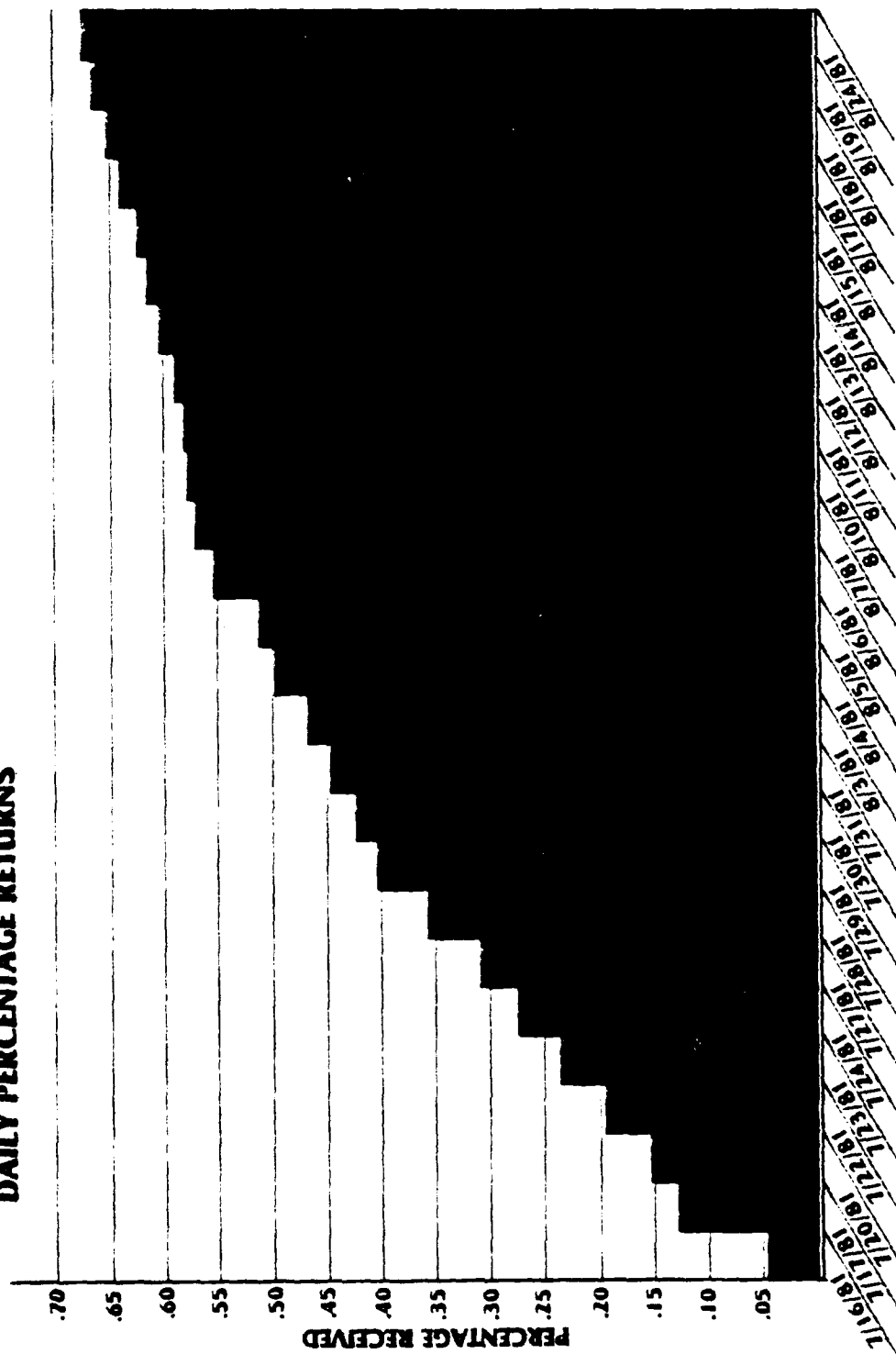
IV.   RESULTS AND ANALYSIS

A.   RESULTS

The final results of the survey with accompanying histo-
grams which display how the defined population responded to
each question are contained in Appendix E.   The appendix
presents an unaltered, unbiased condensed display of the
data extracted from the questionnaire.   This unbiased format
will permit the viewer to interpret the data as he or she
desires.

The raw data was processed using the SPSS routine within
the IBM 3033AP, System 370 computer at the Naval Postgraduate
School.   A hard copy, in punch card form, was also produced
of the results and will be maintained by Professor Creighton
and NPS should further research be desired.

The graphical results of the comparison the authors made
between the executives from a previous study (Rowe, Rudeen,
Wenke, 1976) and the generals surveyed in our study is con-
tained in the next 56 pages.   These results present a graphic
picture, through the use of bar graphs, which depict per-
centages of responses to each possible answer for all
questions.   It also contains comparisons of the biographical
data from the two populations.

The open boxes portray executives while the striped
portray military.

% of Sample

15%

10%

5%

Executive

Military

33 34 36 40 41 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 72 79

AGE

% of Sample

SEX

MALE

FEMALE

98.0

92.6

7.3

2.0

100
90
80
70
60
50
40
30
20
10

% of Sample

HEIGHT

5.4 to 5.6 — 8.9, 3.0
5.7 to 5.9 — 13.71, 22.0
5.10 to 6.0 — 54.8, 54.0
6.1 to 6.3 — 19.3, 17.0
6.4 to 6.6 — 3.2, 5.0

WEIGHT

% of Sample

84

RACE

% of Sample

% of Sample

EDUCATION

High School 6.5

BA 20.3 | 2.0

BS 38.2 | 8.0

MBA 14.6 | 13.0

MPA .8 | 4.0

MASTERS 11.4 | 63.0

PHD 8.1 | 11.0

FIELD OF STUDY

% of Sample

87

% of Sample

% of Sample

NUMBER OF TIMES MARRIED

SPOUSE EDUCATION (YEARS)

% of Sample

% of Sample

100 90 80 70 60 50 40 30 20 10

None   Catholic   Jewish   Other   Protestant

RELIGIOUS PREFERENCE

6.5   3.0   11.3   25.0   3.2   1.0   6.5   2.0   72.6   69.0

91

% of Sample

HAVE YOU CHANGED YOUR RELIGIOUS PREFERENCE

92

HOW MANY TIMES HAVE YOU CHANGED YOUR RELIGION

% of Sample

93

FATHER'S OCCUPATION

% of Sample

Blue Collar: 15.6, 18.0
Hi Professional: 39.3, 19.0
Lo Professional: 6.6, 20.0
White Collar: 30.3, 23.0
Agric: 8.2, 7.0
Other (Military): 13.0

QUESTION 22 (ORGMEMB)

% of Sample

QUESTION 23 (FRIENDS)

% of Sample

A (None) 2.5 · B (1-2) 4.9 6.0 · C (3-5) 22.9 11.0 · D (6+) 50.0 70.0 · E (Don't Know) 19.7 13.0

% of Sample

QUESTION 24 (CONTACT)

	A (0-4)	B (5-8)	C (9-12)	D (12-16)	E (16+)
	10.7	37.7	24.6	12.3	14.8
	1.0	14.0	20.0	13.0	52.0

97

QUESTION 25 (DECIDE)

% of Sample

% of Sample

QUESTION 26 (TIMEINF)

A (Much Before) 27.5 / 17.0
B (Before) 36.7 / 46.0
C (Same Time) 28.3 / 35.0
D (Later) 5.8 / 1.0
E (Much Later) 1.7 / 1.0

QUESTION 27 (FREQINF)

% of Sample

QUESTION 28 (IDEA)

% of Sample

QUESTION 29 (SOURCINF)

% of Sample

QUESTION 30 (NEW IDEA)

% of Sample

	A (Analyze)	B (Observe)	C (Delegate)	D (Discuss)	E (Cost Analyze)
	17.2 / 17.0	2.5 / 7.0	36.1 / 37.0	43.4 / 39.0	.8 / 1.0

QUESTION 31 (COMMUNIC)

QUESTION 32 (JOURNAL)

% of Sample

% of Sample

QUESTION 33 (LESSAL)

100
90
80
70
60
50
40
30
20
10

66.1

A
(Yes)

46.0

33.9

B
(No)

53.0

106

% of Sample

QUESTION 35 (WORTH)

107

QUESTION 36 (TIMELIM)

% of Sample

A (Not Pressed)   21.1   14.0
B (Want More)   39.8   33.0
C (Need to Push)   16.3   19.0
D (Not Enough)   1.6   12.0
E (Never Enough)   21.1   22.0
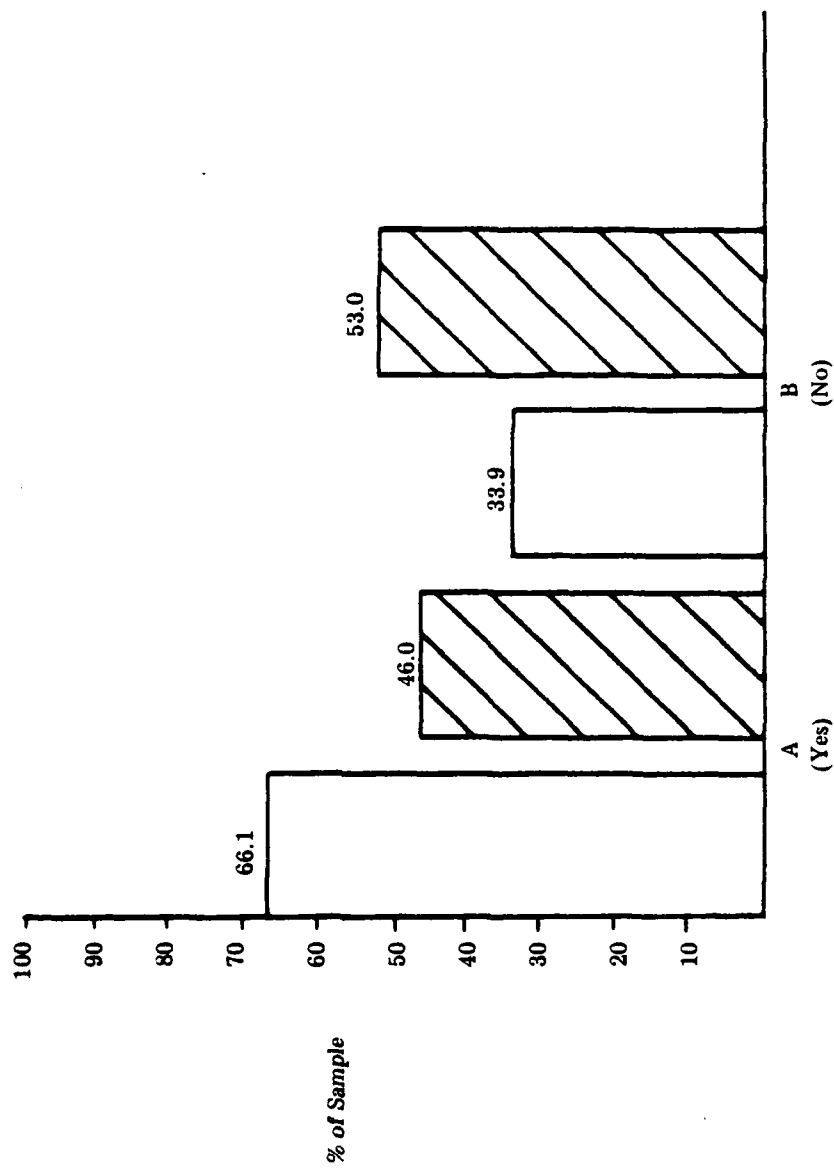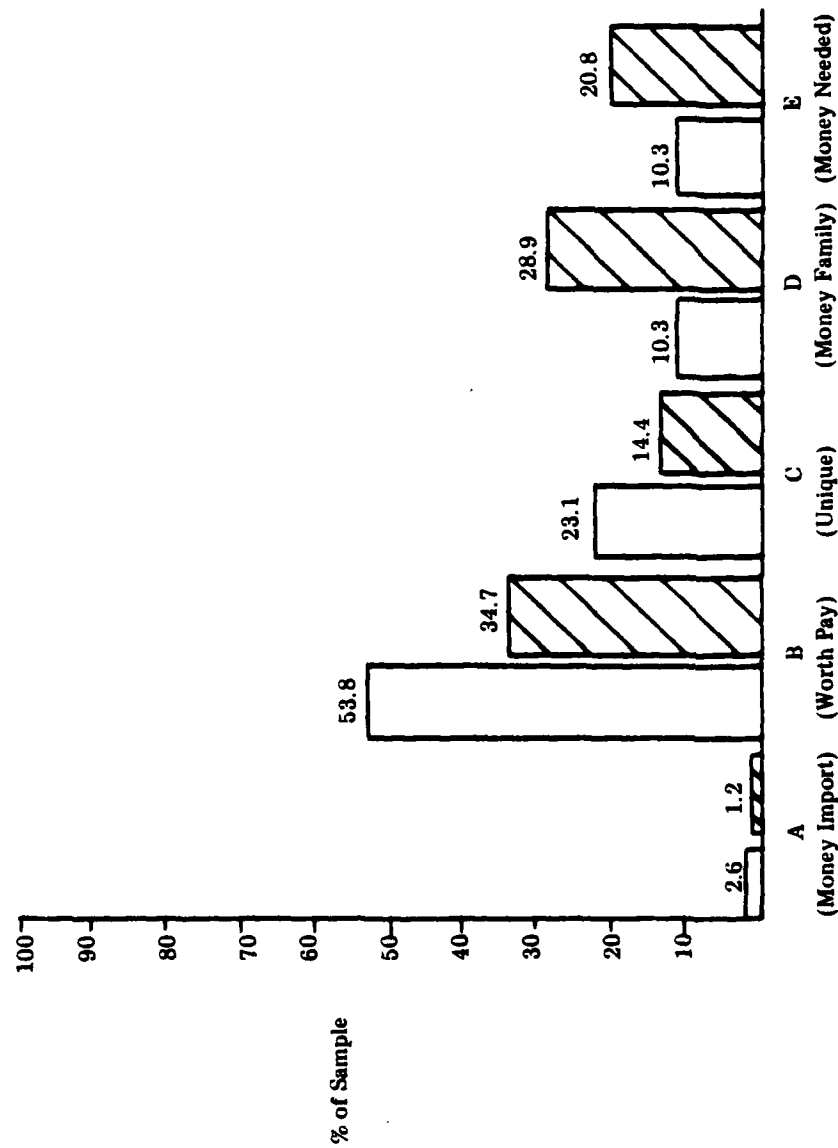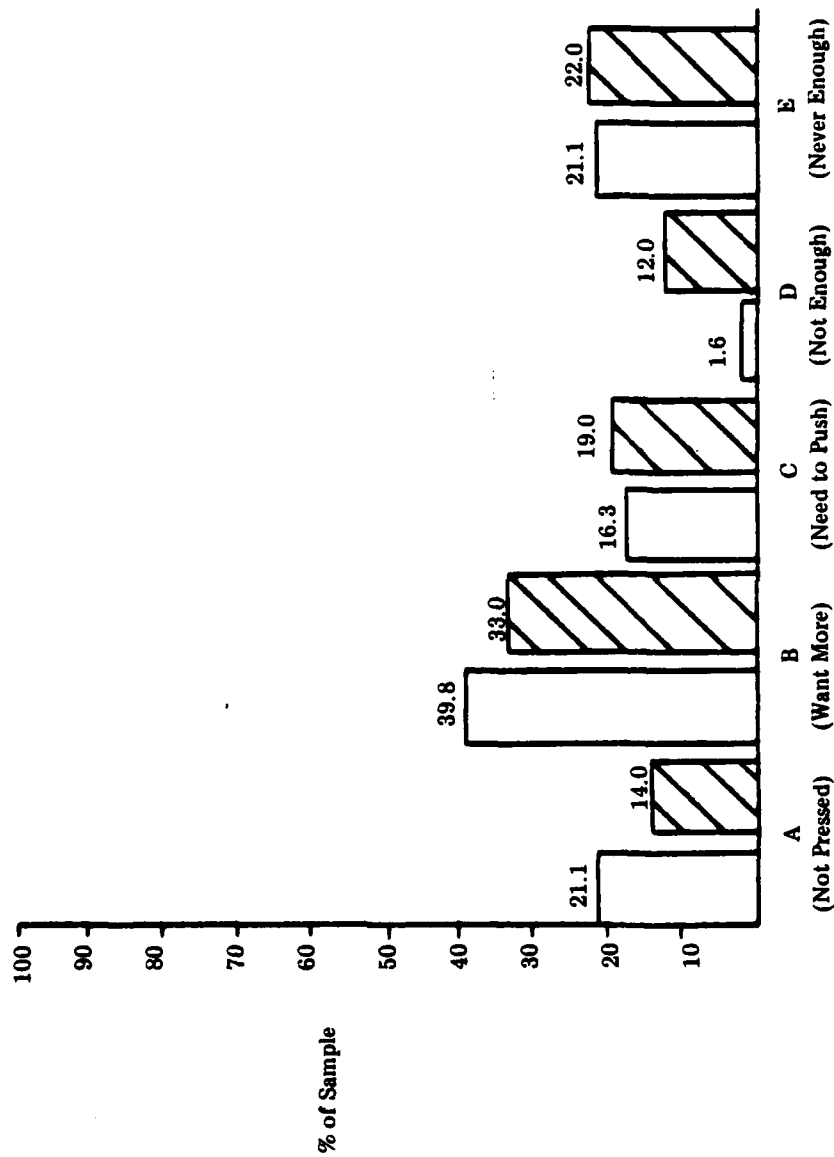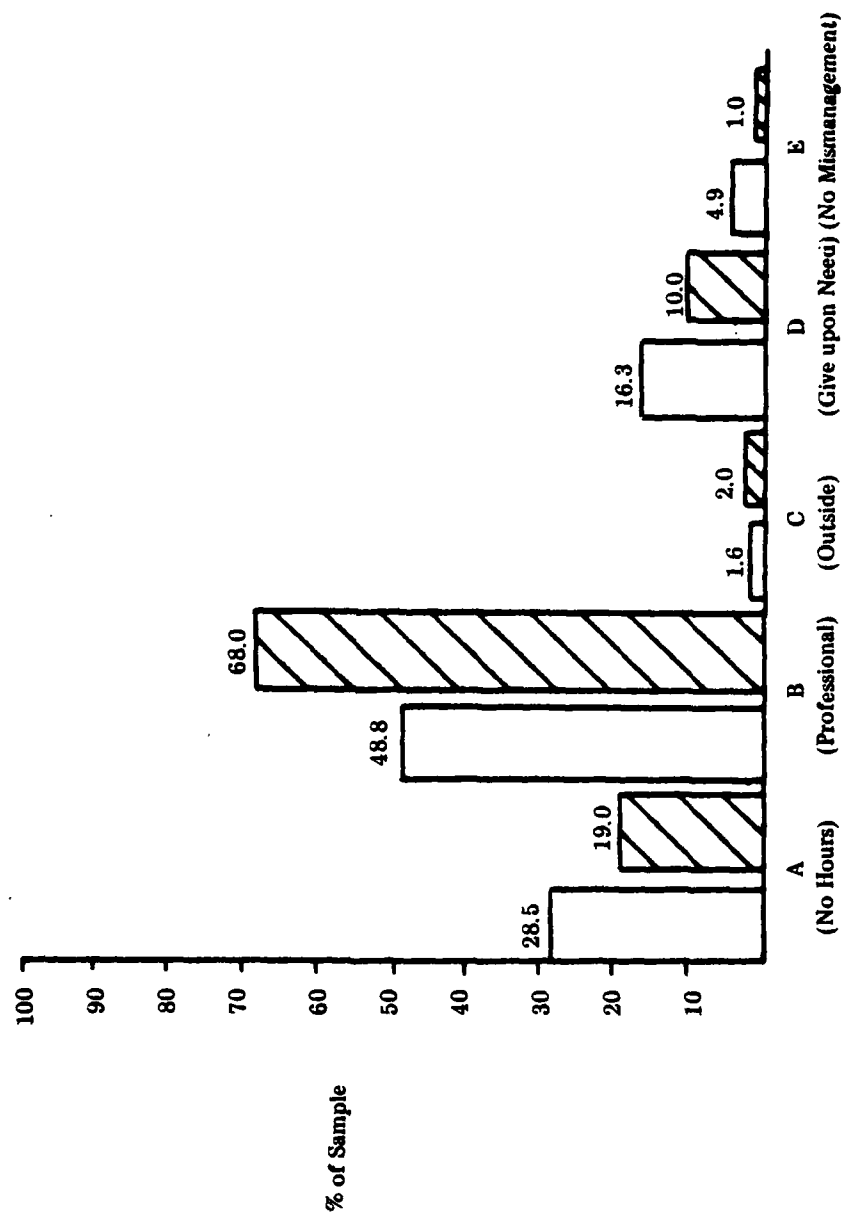
QUESTION 37 (FLEXTIME)

109

QUESTION 38 (SITUATED)

% of Sample

100
90
80
70
60
50
40
30
20
10

A (Time for Unexp) — 60.2

(Heavy Schedule) 39.0

B — 35.8

51.0

(Subord) .8

C — 1.0

(Organized) 3.2

D — 9.0

E (Impress Boss)

110

QUESTION 39 (POLICY)

% of Sample

111

% of Sample

A
(Accept Equal)
15.0
9.0

B
(Accept Continue)
7.5
5.0

C
(Analyze Cause)
60.8
68.0

D
(Aim to Succeed)
1.7
1.0

E
(Successful)
15.0
17.0

QUESTION 40 (ACCEPT)

112

% of Sample

	A	B	C	D	E
	(Change Maverick)	(Adjust Org)	(Allow Style)	(Suggest Change)	(Don't Select)

2.5, 4.0, 4.1, 1.0, 30.3, 31.0, 59.0, 60.0, 4.1, 4.0
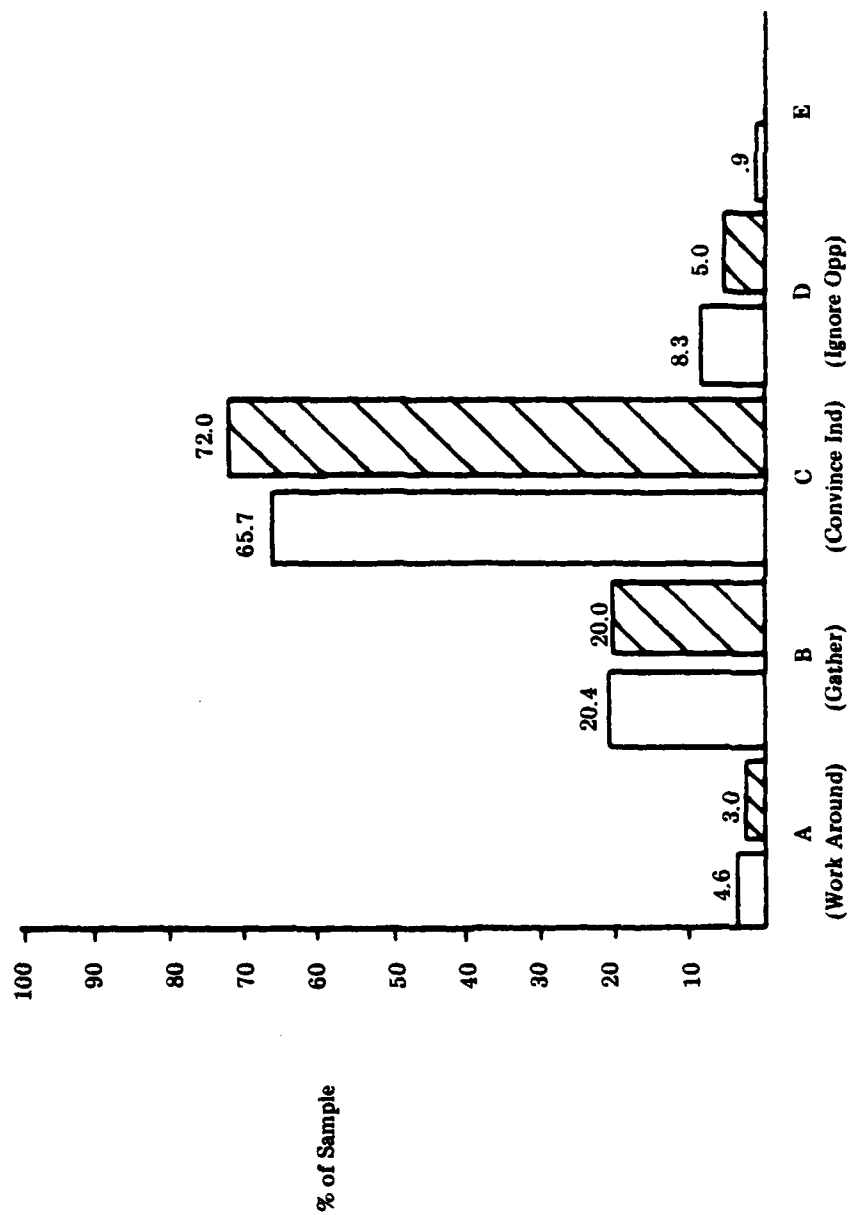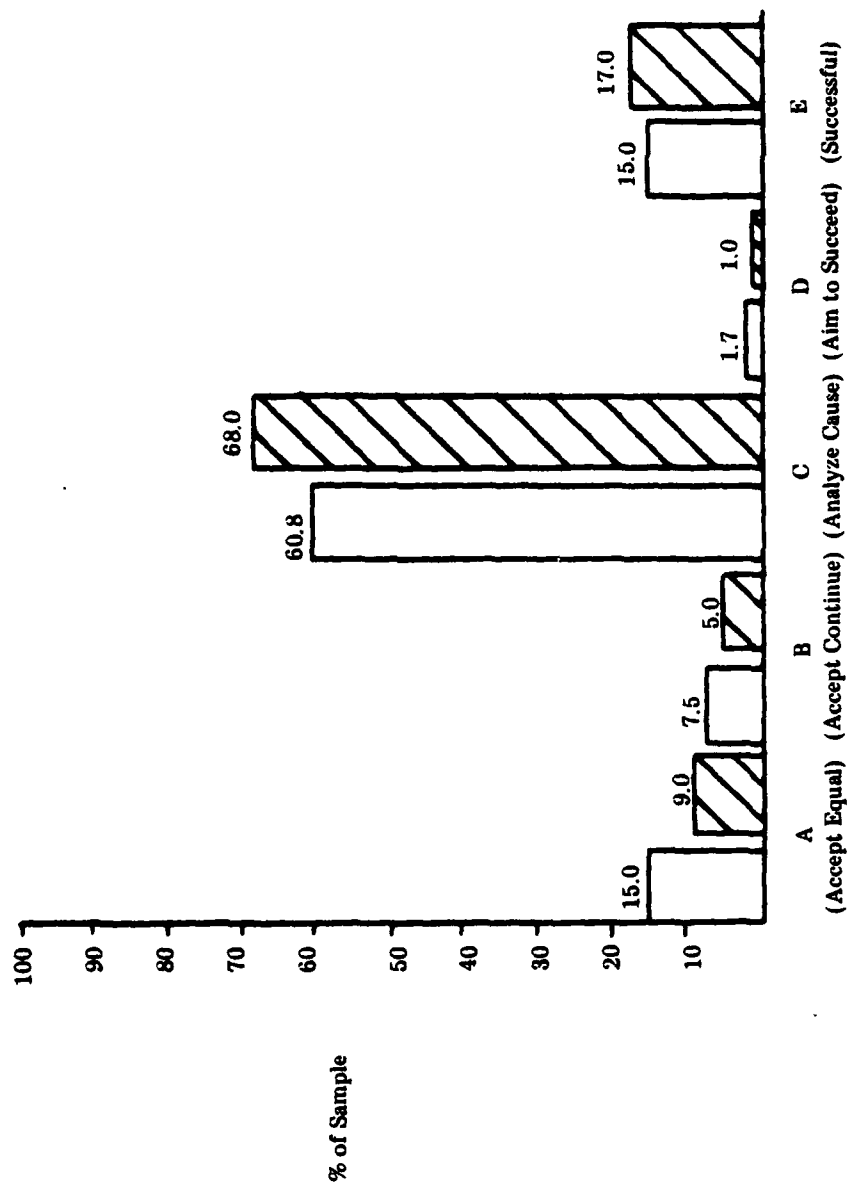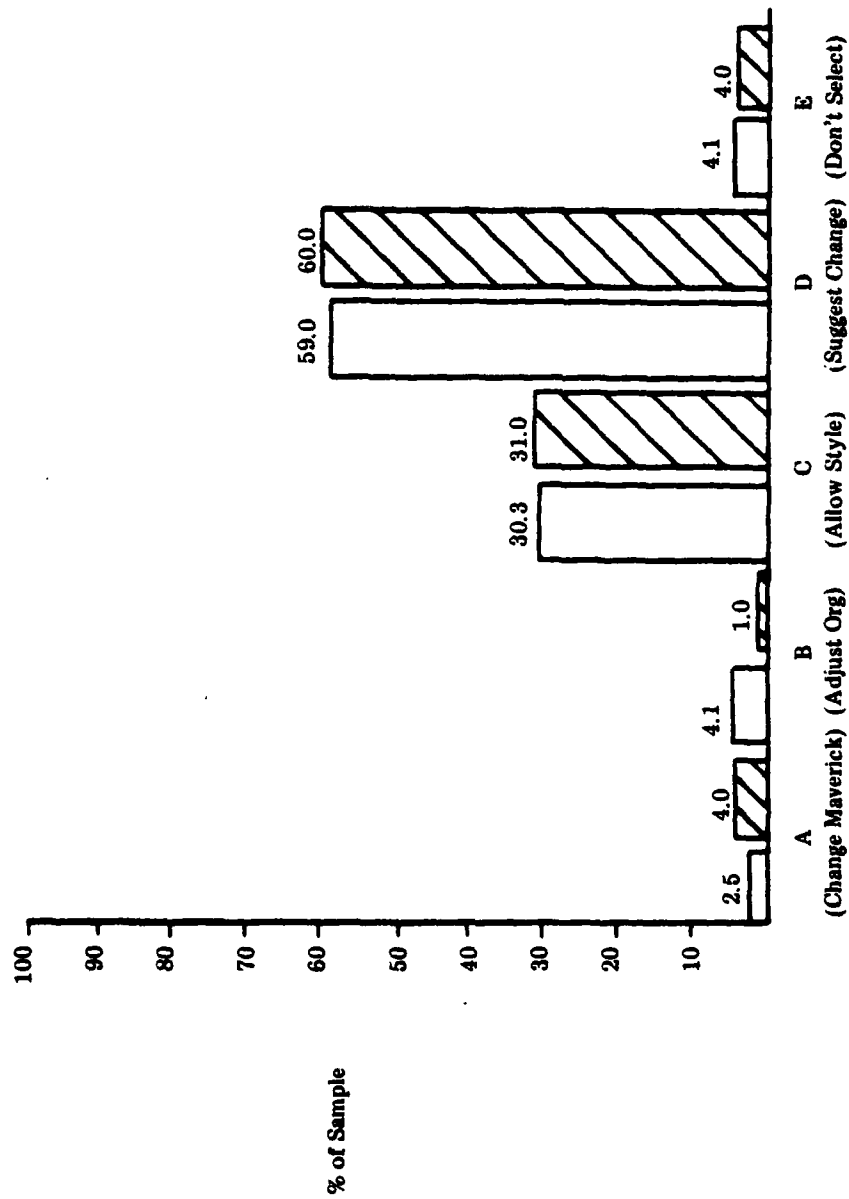
QUESTION 41 (MAVERICK)

113

QUESTION 42 (PROMOTED)

% of Sample

A (Caution): 14.3, 7.0
B (Wait): 22.4, 12.0
C (Fast): 21.4, 29.0
D (No Trouble): 29.6, 41.0
E (Gradual): 12.2, 11.0

114

QUESTION 43 (RELATION)

% of Sample

A (Family): 32.5, 32.0
B (Choice not Forced): 19.5, 16.0
C (Family Second): 24.4, 32.0
D (Compromise): 8.9, 2.0
E (Lengthy Hours): 14.6, 18.0

QUESTION 44 (UNDESPOS)

% of Sample

116

QUESTION 45 (ASSIGN)

% of Sample

QUESTION 46 (LEAVE)

% of Sample

A
(Long)

B
(Fit)

C
(Family)

D
(Not Long)

E
(Health)

18.8

3.0

29.5

56.0

32.0

26.0

15.6

14.0

4.1

QUESTION 47 (HEALTH)

% of Sample

QUESTION 48 (FIRE)

% of Sample

QUESTION 49 (CONFLICT)

100
90
80
70
60
50
40
30
20
10

% of Sample

A
(Married to Job)

20.0
13.0

B
(Past Mode)

11.1
8.0

C
(Violate Ethics)

46.7
51.0

D
(Subord Effect)

3.0

E
(Differ Opinion)

22.2
25.0

QUESTION 51 (ADVISE)

% of Sample

| A (2-10) 200%: 8.0, 7.7 | B (4-10) 100%: 24.0 | C (6-10) 50%: 42.3, 49.0, 42.3 | D (8-10) 25%: 16.0 | E (Guarenteed): 7.7, 3.0 |

122

QUESTION 52 (PROCURE)

% of Sample

QUESTION 53 (PRESSURE)
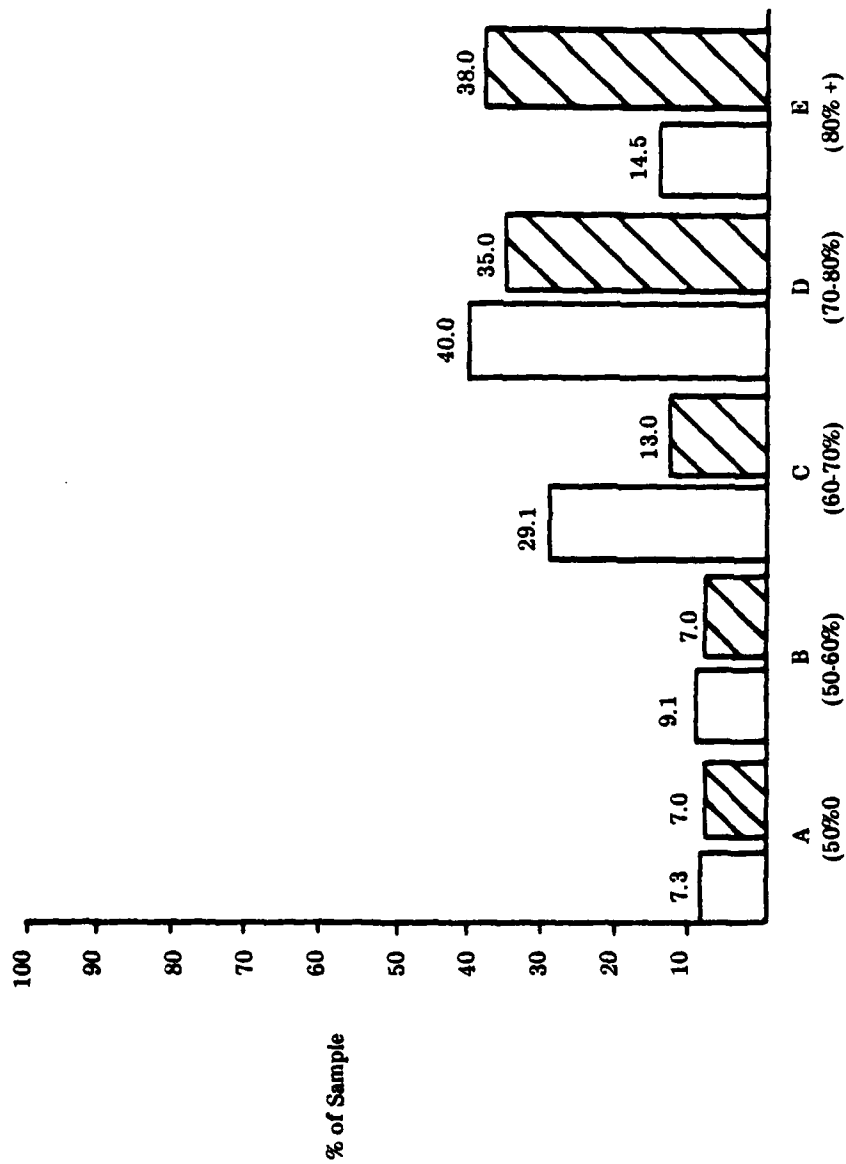
% of Sample

QUESTION 54 (CORRECT)
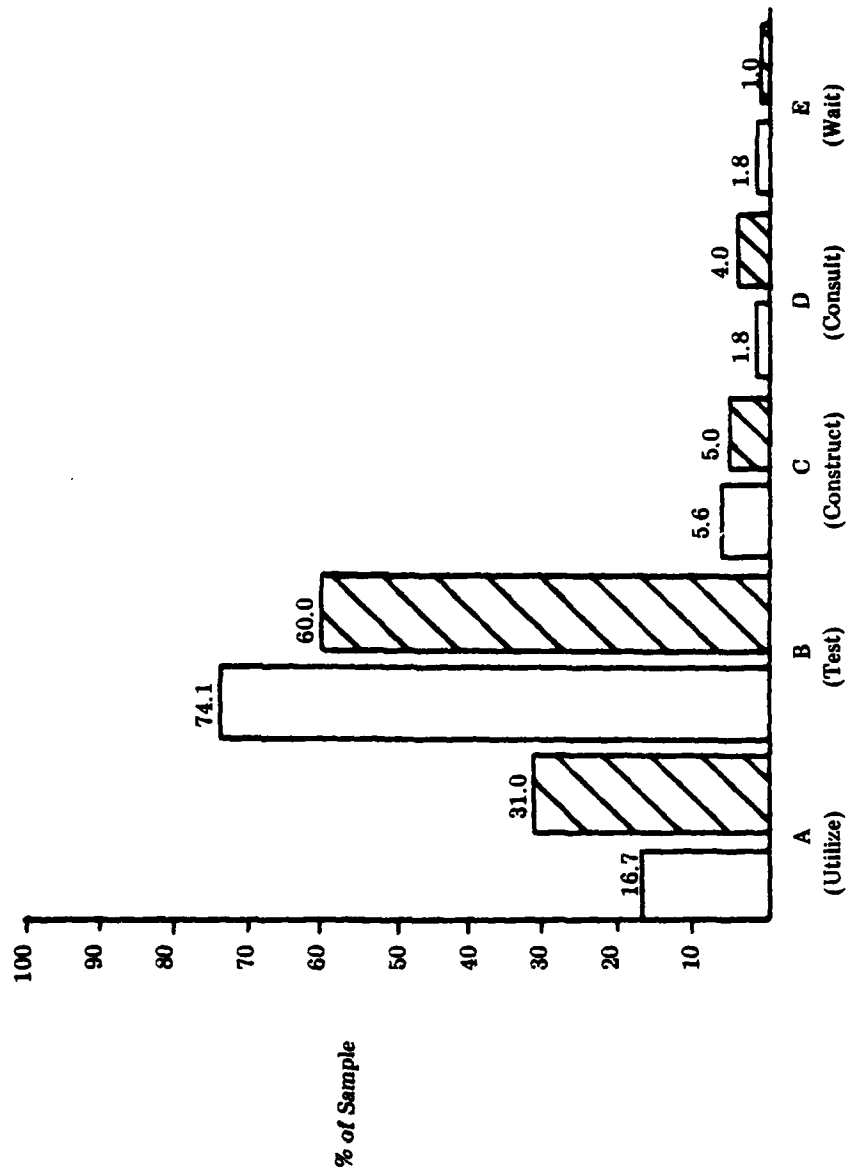
% of Sample

QUESTION 55 (MATERIAL)
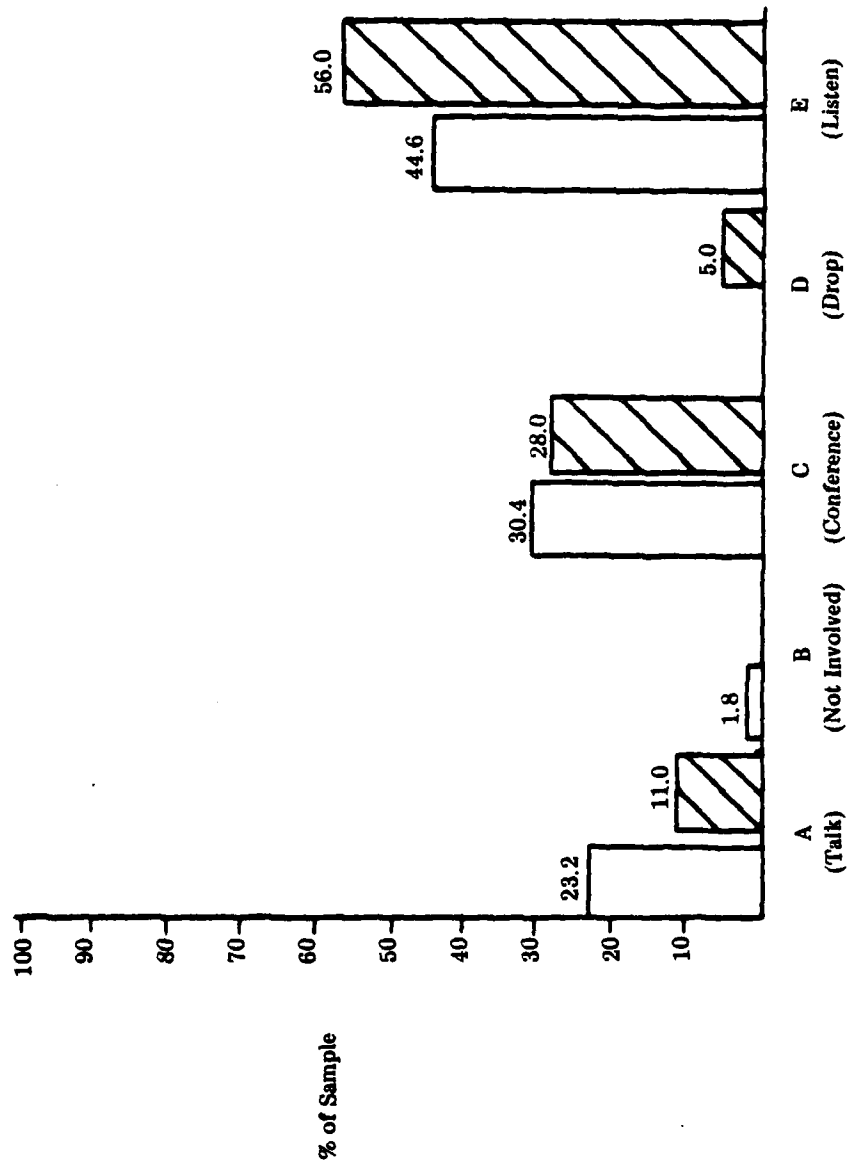
% of Sample

A (Utilize) 16.7 / 31.0
B (Test) 74.1 / 60.0
C (Construct) 5.6 / 5.0
D (Consult) 1.8 / 4.0
E (Wait) 1.8 / 1.0

% of Sample

QUESTION 56 (FIGHT)

127

QUESTION 57 (PASTOVER)

128

% of Sample

100 90 80 70 60 50 40 30 20 10

69.6

82.0

30.4

18.0

A
(Sets Plans)

B
(Implements)

QUESTION 58 (SUBORD)

129

QUESTION 59 (PERSONAL)

130

% of Sample

100
90
80
70
60
50
40
30
20
10

66.7

58.0

33.3

42.0

A
(Firm)
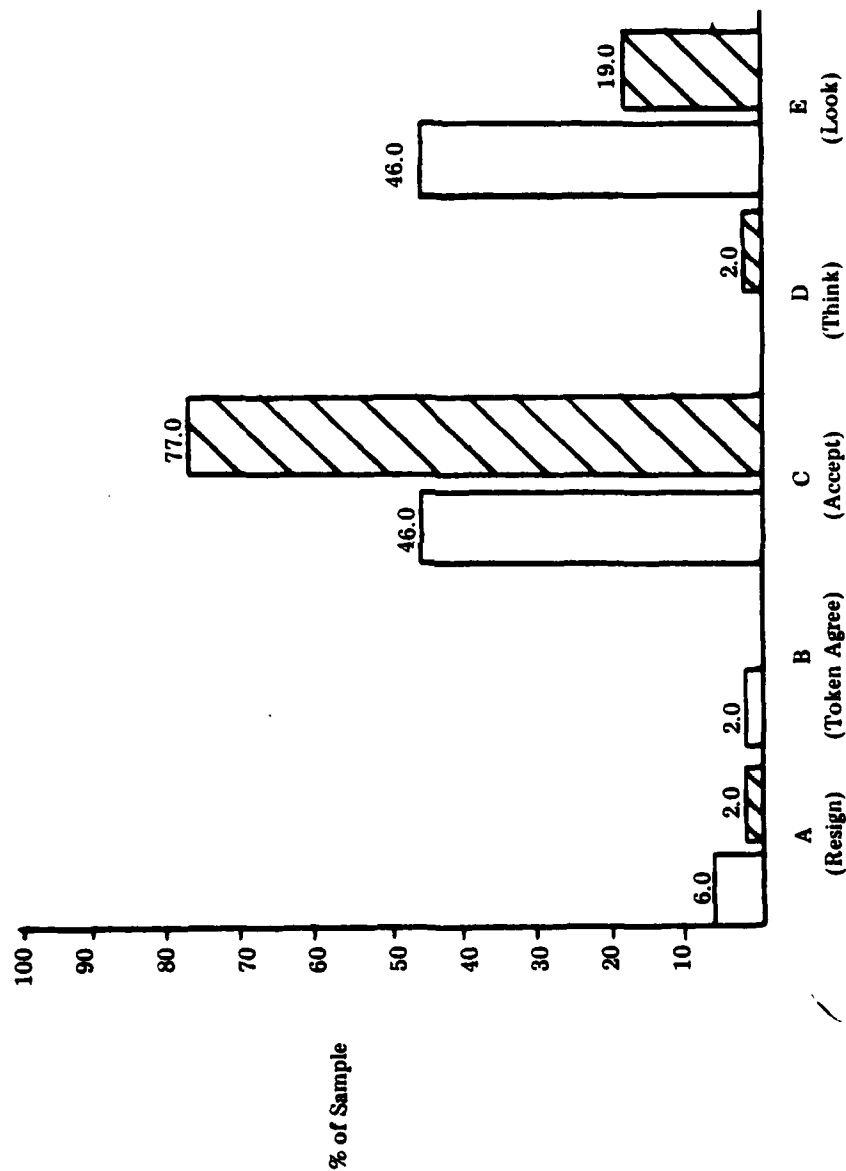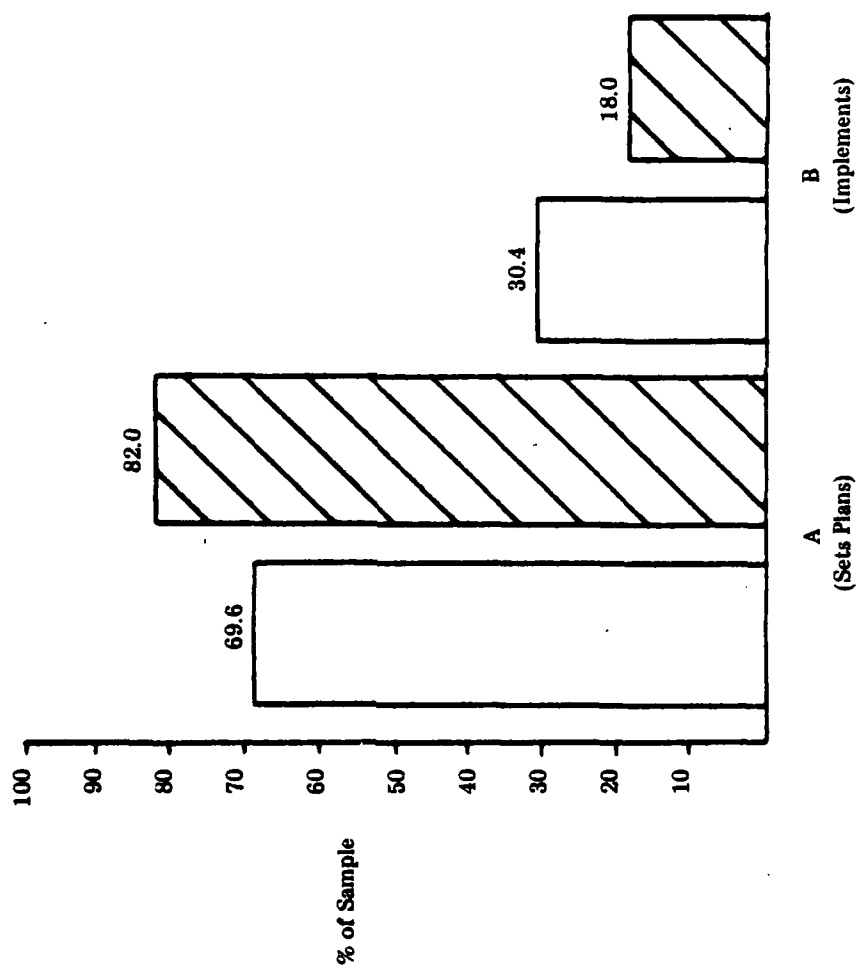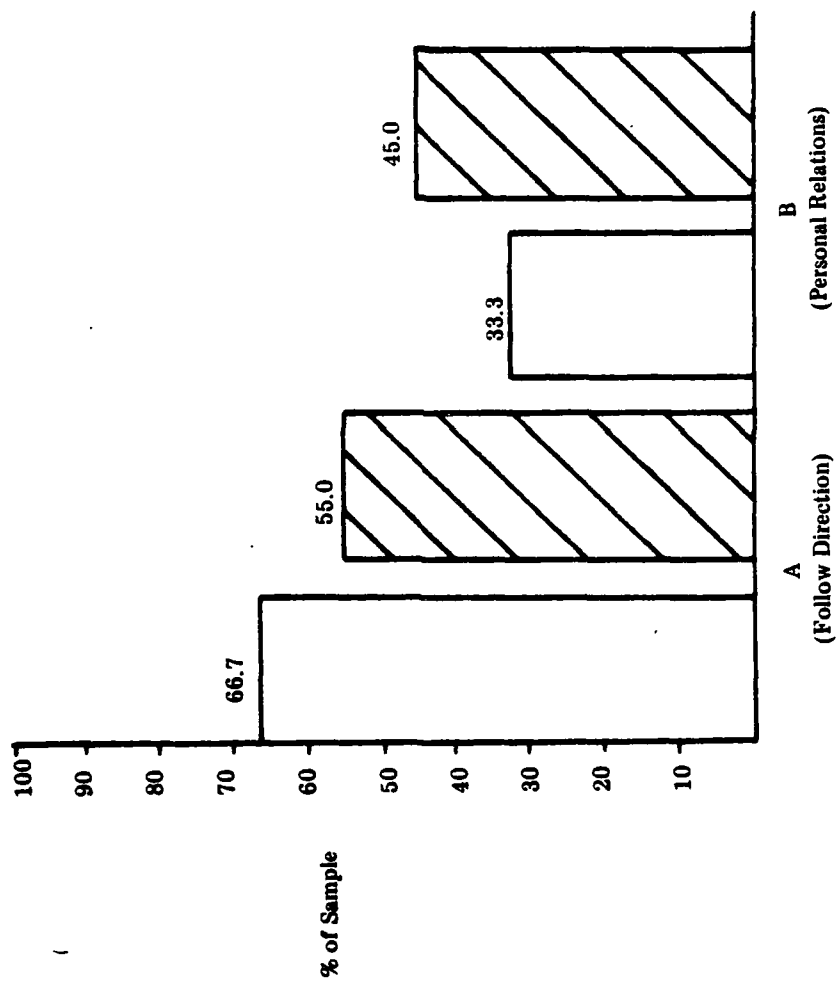
B
(Occasional)

QUESTION 60 (DISCIPL)

131

QUESTION 61 (PERFORM)

% of Sample

QUESTION 62 (ACT)

% of Sample

100 — 90 — 80 — 70 — 60 — 50 — 40 — 30 — 20 — 10

33.9

28.0

66.1

72.0

A
(Overcome)

B
(Immediate Act)

133

% of Sample

100
90
80
70 — 69.6
60 — 62.0
50
40 — 38.0
30 — 30.4
20
10

A
(Guided)

B
(Independent)
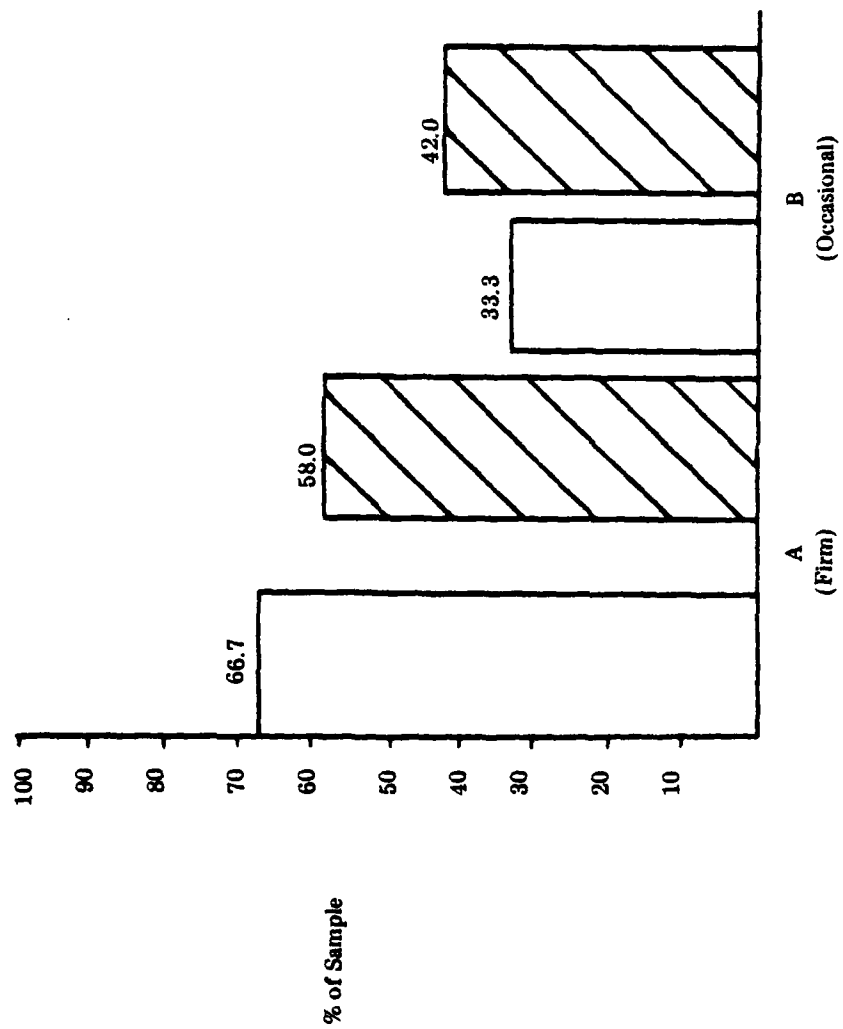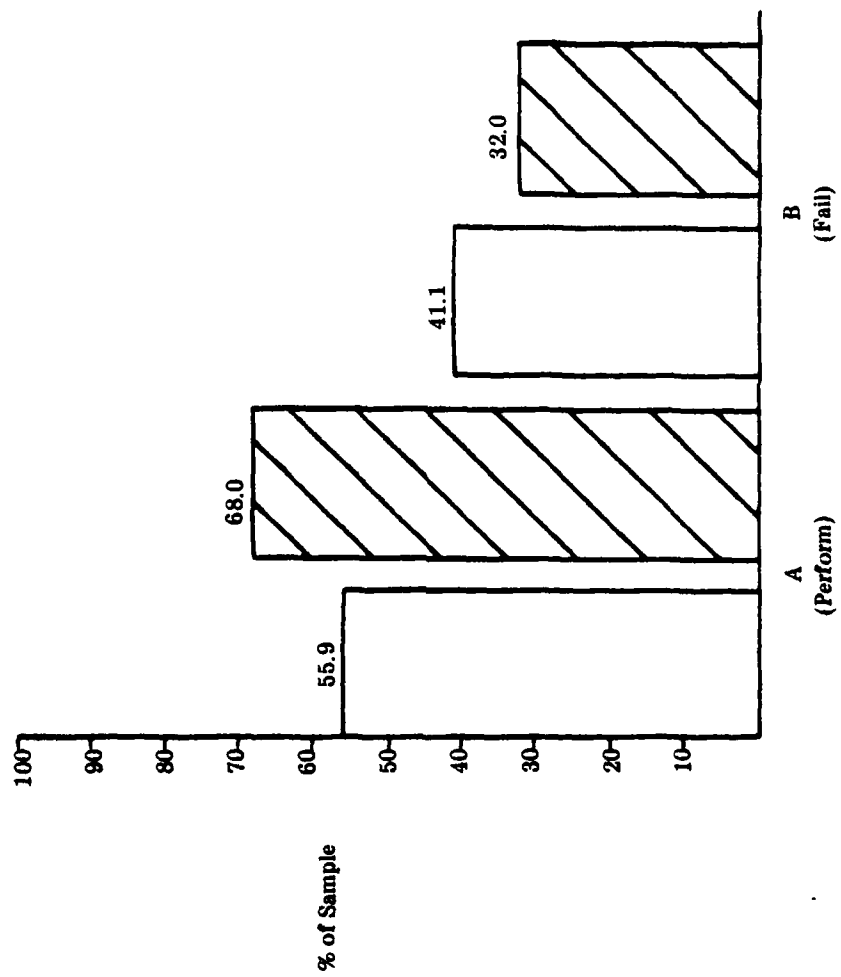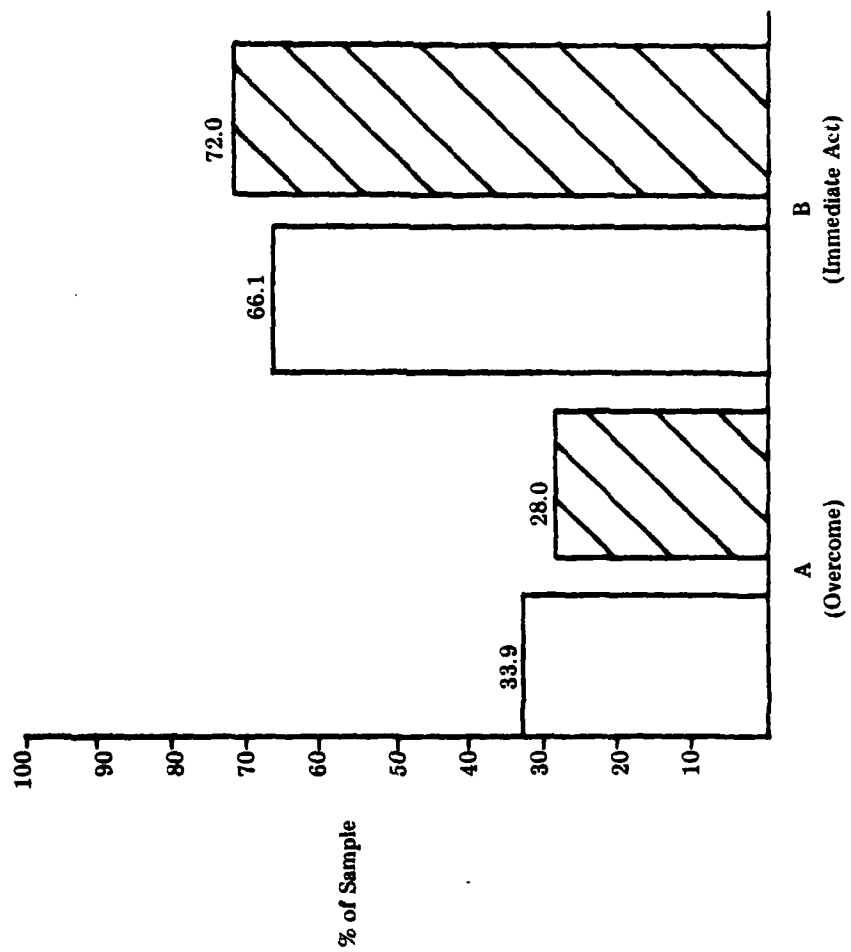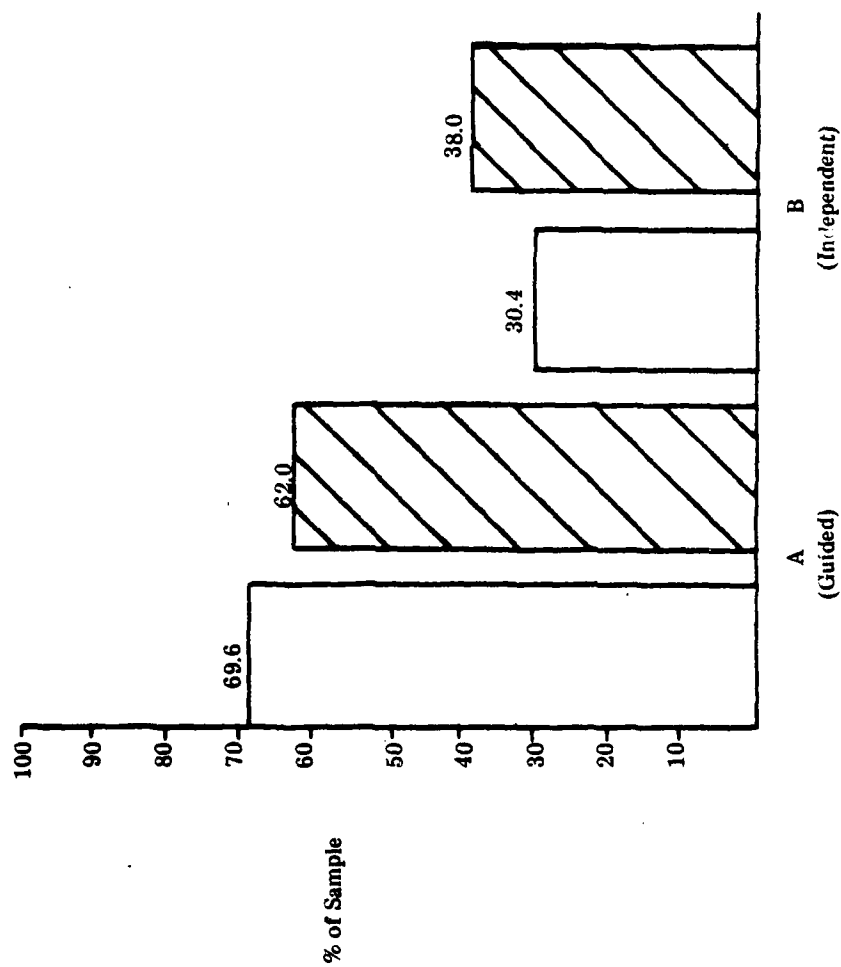
QUESTION 63 (PERSUADE)
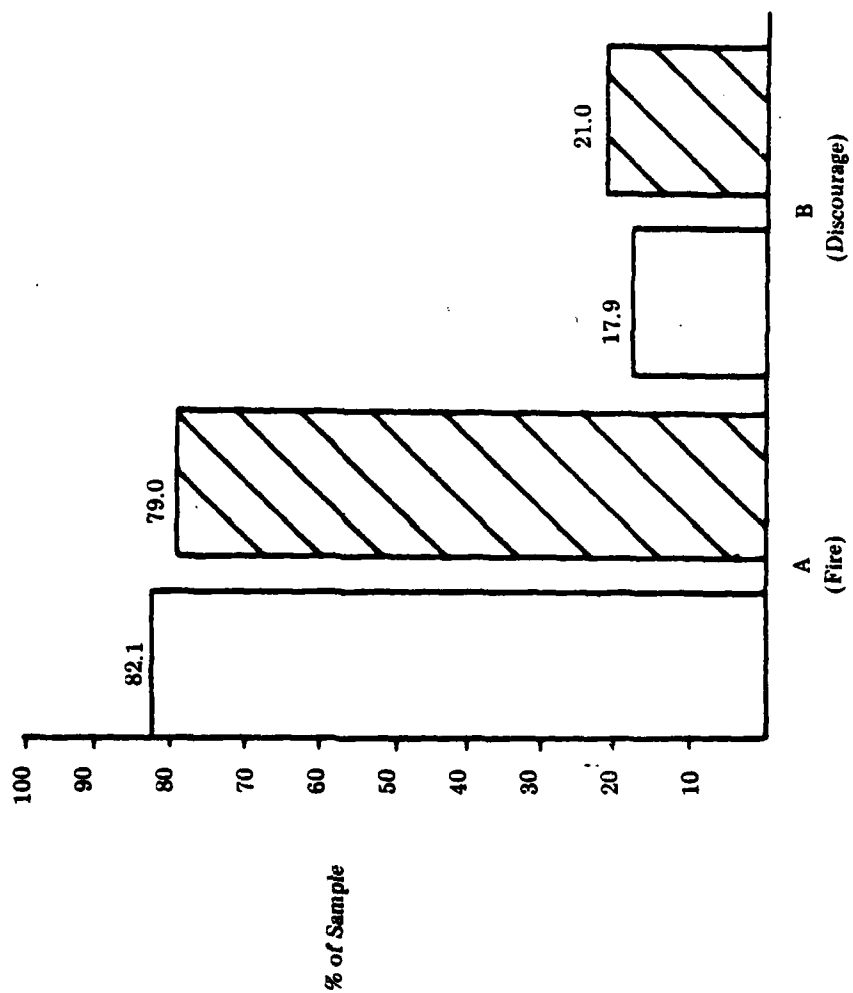
QUESTION 64 (HARMONY)

% of Sample
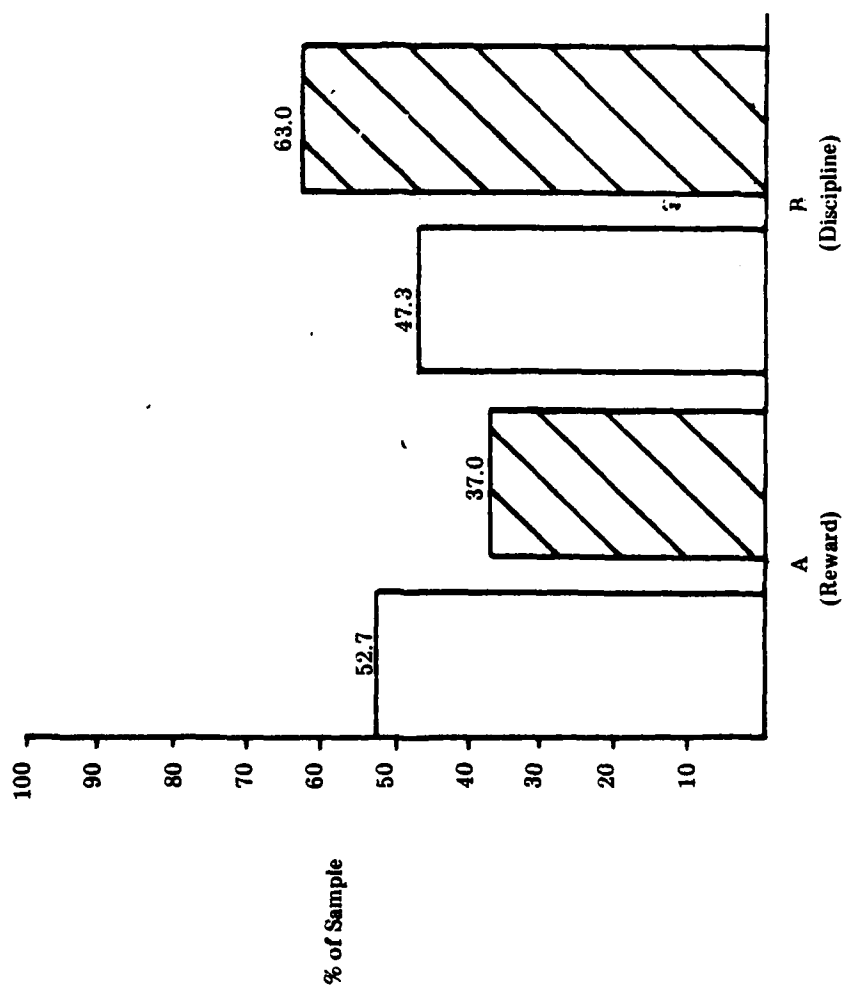
QUESTION 65 (PUNISH)

% of Sample

136

B. ANALYSIS

The primary objective of the analysis was to test whether or not there was a difference in the way top level executives (Population A) from major United States companies responded and military generals (Population B). An analysis of the data indicated that hypothesis 1 could be tested. The hypothesis was:

Hypothesis 1: There will be no statistical difference in the way today's Army General responds to given questions as compared with top executives in the private sector of the 1976 study.

Hypothesis testing was also accomplished on each question within the instrument as well as on aggregate questions which made up capacity indicator groups. The tests were done using the Chi-square method which will be explained next.

C. TEST USED AND SIGNIFICANT FINDINGS

The non-parametric, Chi-square, statistical test was used to test hypothesis on capacity indicator groups between executives in the civilian sector and the Army generals in our population. Application of these tests determined the acceptance or rejection of each hypothesis at the .05 level of statistical significance. The Chi-square formula used along with individual question computations is contained in Appendix D.

The results from comparing the two populations against the fourteen capacity indicators are shown in Table 1. This

137

TABLE 1

Comparison of Population Executive and Army General

1	2	3	4	5
Capacity Indicator	X^2	Degrees of Freedom	X^2 at 95%	Comparison
1. Desire for Power	16.38	7	14.07	Difference (more)
2. Rewarding Family Life	37.62	7	14.07	Difference (more)
3. Ability under Stress	20.51	5	11.07	Difference (more)
4. Ability to Manage Time	50.87	11	19.68	Difference (less)
5. Health	28.83	4	9.49	Difference (more)
6. Communicative Ability	134.15	17	27.59	Difference (more)
7. Decision Making Capability	76.63	18	28.87	Difference (more)
8. Psyche/Status	40.52	8	15.51	Difference (less)
9. Job Security	43.95	3	7.82	Difference (less)
10. Reaction to Conflict	10.03	6	12.59	Same
11. Courage to Commit Resources	82.33	11	19.68	Difference (more)
12. Intuition	16.03	4	9.49	Difference (more)
13. Innovativeness	76.23	20	31.41	Difference (more)

table indicates that the Army generals responded similarly to executives only on the capacity indicator, Reaction to Conflict. They differed in all other indicator classes tested. The capacity indicator, Mobility, was not tested due to organizational differences between the selected populations.

Although the responses were significantly different in twelve of the thirteen capacity indicator groups, tests done by specific questions show the Army generals and executives responding the same on fourteen specific questions. Those questions were:

Q. 27	Q. 40	Q. 56	Q. 63
Q. 30	Q. 49	Q. 60	Q. 64
Q. 31	Q. 53	Q. 61	
Q. 39	Q. 55	Q. 62	

Table 1 is divided into five columns. The explanation of these columns is as depicted below:

Column 1 - Capacity indicator class.

Column 2 - X^2 values resulting from comparison of total scores of population "Executives" against population "Army Generals" in each capacity indicator class.

Column 3 - Degrees of freedom. The number of degrees of freedom is the number of responses minus one per question in each capacity indicator group.

Column 4 - X^2 value of which the difference between populations "Executives" and "Army Generals" is assured at the 95% confidence level. This figure came from the Chi-square tables.

Column 5 - The populations are different when Column 2 is greater than Column 4, and the same when Column 2 is less than Column 4. The term in parehtneses denotes which direction the generals differ in their responses.

D. ARMY GENERAL PROFILE

The following depicts a profile of today's Army General as gathered from selected data within the survey instrument. It is only intended to give the reader a brief synopsis of some biographical data using the model and mean categories.

1. Position

Thirty-seven percent of those generals who responded entered their duty position as Commander. Another 30% responded that they were heads of a staff or in another staff position.

2. Age

Fifty-three percent of the survey population fell between the ages of 49 and 54. The mean age was 50.

3. Sex

Ninety-eight percent of the respondents were male.

4. Height

The mean or average height of the generals returning the survey was 5 feet 11 inches. Fifty-four percent of the population were between 5 feet 10 inches and 6 feet tall.

5. Weight

42.7% of the generals are between 166 and 185 pounds with the average weight being 175 pounds.

6. Race

Ninety-three percent of all respondents were white.

7. Education

Sixty-three percent of the population had a masters degree with 11% having doctorates. Thirty-eight percent of all degrees fell in the soft science category.

8. Marital Status

Ninety-two percent of the generals were married and had been married only one time.

9. Spouse Education

Thirty-one percent of the spouses had 16 years of education with an actual mean of 14.6 years of education.

10. Years in the Army

The average time in service of the generals was 28 years with 13% having 27 years.

11. Religion

Sixty-four percent of the respondents were Protestant and 84% had not changed their religious preference.

12. Father's Occupation

The numbers in this section were well distributed with 23% of the generals' fathers falling into the white-collar job category. An actual count of 42 fathers were retired from the military.

13. Organizational Membership

Forty-eight percent of the generals belonged to three or four organizations.

14. Source of Information

Eighty-five percent of the generals either gathered their information from personal experience or their staffs.

15. Health

Forty-seven percent responded that they were in better health than most people of their age with 21% saying they were in perfect condition.

16. Would Work for Less Pay

Fifty-three percent said they would not work for less pay and of those 19% said so because they felt they were worth what they were being paid.

E. NARRATIVE EXCERPTS FROM THE QUESTIONNAIRES

The following are written comments which were included in the questionnaire. Section 1 provides general comments and Section 2, the comments made about specific questions.

1. General Comments

"I would answer many of these questions in a different way were I a subordinate member of an organization that relies on consensus rather than the commander of a Combat Division that must respond promptly to orders."

"Command and Management are entirely two different things."

"Your assumption that I am successful may be in error."

"One simply cannot simplify management decisions to the extent of a questionnaire."

2. Comments on Specific Questions

   a. Question 25

Which of the following best describes what you usually do in
making important decisions?

A. Make the decision and inform your boss later.
B. Make the decision as if it were a routine matter.
C. Put the problem up to those affected by the decision.
D. Decision-making is not my responsibility.
E. Take time to check with your boss.

   "This is a loaded question. Within my area of responsi-
   bility I make most decisions on a routine basis. If
   important means sensitive or has a broad impact, then
   I coordinate usually with those affected as well as my
   boss."

   b. Question 27

Indicate the frequency with which your subordinates, peers,
and/or superiors came to you in the past month for work-
related information which was not a function of your position.

A. 1 - 3
B. 4 - 7
C. 8 - 11
D. 12 - 16
E. 17 or more

   "Just not relevant; everything is related to my position."

   "Difficult to be work related without being my function."

   "As a commander I'm responsible for everything."

   c. Question 35

If No, why not?

A. Money is very important to you.
B. You are worth what you are being paid.
C. For your unique skills, you will not work for less than
   your present salary.
D. Money is not a direct concern to you, but it is important
   to your family.
E. Present earning power is necessary to provide a portfolio
   for future security.

143

"Salary is now capped. I am apparently worth more than
I am being paid."

"Salary is tied directly to grade and this job could not
be done effectively by other than a general officer."

"I'm worth a hell of a lot more."

　　　　d.　Question 38

Of the situations given, which of these best describes your
work routine?

A.　You have time in your daily routine to spend time on the
　　unexpected.
B.　As a general rule, your daily schedule is very heavy.
C.　If it were not for your subordinates taking up a good
　　part of your time, you would have more than enough time
　　to expand your involvement in the organization.
D.　You have no difficulty with the management of your time
　　since you set a fixed and precise daily schedule, allow-
　　ing time for your seniors, subordinates, and whatever is
　　left belongs to you.
E.　You are concerned with the amount of time you have to
　　spend at the office because you feel your superiors
　　interpret this as an indicator of ineffectiveness.

　"My routine is to handle the unexpected."

　　　　e.　Question 39

You are about to propose a new policy which you feel is good
for the organization. You intuitively believe, however,
that you will have difficulty convincing certain segments
of the organization. You are further aware that unless you
receive almost across-the-board concurrence, it will be
difficult to convince your boss to implement the policy.
How would you go about "seeing to it" that your policy is
accepted?

A.　Work around the opposition, by going directly to your
　　superiors and attempt to convince them of the need for
　　your proposed policy.
B.　Determine who your supporters are and seek their assistance
　　to favorably impress the opposition.
C.　Specifically, identify those individuals who are opposed
　　and attempt to convince them individually.
D.　Ignore the opposition and continue with your new policy
　　changes.
E.　Postpone introduction of the policy change and wait for
　　better timing.

"The boss hires me to run the organization, don't often have to convince him."

"Both B & C must be used. It's necessary to consolidate your support or it may not be there when you need it."

     f. Question 40

As a decision-maker:

A. You accept success and failure equally.
B. When you have failed, you have accepted the consequences and continue on as before.
C. When you fail, you accept the consequences and will analyze the causative factors thereto. Such a setback will not deter your future efforts.
D. Your aim is to always succeed no matter what procedures or methods must be employed to accomplish your objectives.
E. You are successful because you thoroughly investigate the parameters surrounding the decision about to be made.

"I never fail."

     g. Question 42

If you have just been promoted two levels above your present position, you would function at this new level:

A. By proceeding cautiously before making decisions.
B. By waiting to gain confidence and with additional experience make decisions faster than when initially assigned.
C. With no delay in decision-making because earlier training and experience adequately prepared you for this increased responsibility.
D. Because in the past when assigned to a new or unfamiliar area, you had no difficulty in commanding the new job and therefore, would anticipate no delay in decision-making now.
E. By growing into the job gradually because of the scope of the position.

"The main thing is taking the time to decide on the strength of your subordinates."

     h. Question 43

As you reflect on your career, judge the present, and postulate about the future regarding the relationship with your family, family responsibilities and demands of your present position, how would you best describe the way in which the relationship exists or developed?

A. Family responsibilities were/are not neglected since a mutual bond of understanding developed as you proceeded through your career, wherein the family was/is supportive of your professional goals.
B. Your family has/did not place you in a position wherein you had to choose between family or professional goals.
C. Family obligations occasionally have taken a secondary position if your professional goals and requirements of your job were to be attained. However, you attempted to make it up to the family whenever the occasion(s) allowed.
D. You attempted to make a compromise decision between the family and the job, but rarely sacrificed the family.
E. Sometimes, demands of the job, i.e., time sensitive issues, demanded that you put more hours on the job than you would like.

"I have sometimes neglected my family more than I could have liked."

i. Question 44

In a position that you feel is not exactly what you want:

A. You do whatever is required and receive what you believe to be only minimal personal or professional satisfaction from the results of your efforts.
B. You consider the results of your efforts to be negligible and, in fact, believe your efforts to be "dog work."
C. Your consider your efforts to be professionally and personally rewarding even though you are not completely happy with your present position.
D. You have, in retrospect, almost always derived personal satisfaction from your job regardless of your personal feelings toward the assignments.
E. You do what is required, knowing or hoping that the present assignment or occupation is only a means to an end.

"Never had one."

"Never been anywhere or had a job I didn't like."

j. Question 45

You accept a specific assignment:

A. Thinking or knowing that it would be only a temporary assignment, carrying with it a promise or possibility that a better position would be available in a reasonable time.

146

B. Realizing that it was exactly what you wanted to do and
    had no desire for higher levels of aspiration.
C. Because of your specific or unique skills that were
    desired by the organization, who was willing to award
    you commensurate with your proven abilities.
D. Because of your unique skills that were desired by the
    organization but you also set your remuneration specific
    demands.
E. Because there were no other positions available or
    opportunities that suited you.

   "Really because it is what the Army needed and wanted.
   It has never detracted from my career goals."

        k. Question 49

Select the one situation which causes you the most conflict:

A. Your family accuses you of being married to your job,
    and demands more time with you.
B. You have been directed to reorganize your activity to
    a mode you objected to in the past.
C. Your organization expects you to violate your personal
    ethics.
D. Your subordinate directly countermands your directions,
    however, his actions have led to increased effectiveness.
E. You have a difference of opinion with your next higher
    command on the goals and objectives of the organization
    you head.

   "None of these apply. The one situation which causes
   me the most conflict is a subordinate who fails to plan
   ahead and is not sensitive to the needs of his/her
   subordinates."

   "I have no real conflicts."

   "The situations you describe were a sore spot in my last
   assignment. I do not anticipate these situations in my
   most recent civilian assignment."

        l. Question 50

Your staff of ten members disagrees with you on an issue in
which you strongly believe. What is the highest level of
opposition that you would tolerate before yielding to the
staff?

	FOR		AGAINST
A.	0	-	10
B.	2	-	8
C	3	-	7
D.	4	-	6
E.	5	-	5
F.	Would not yield no matter what the opposition.		

"Would I go against the staff recommendations? Yes.
This happens all the time in line vs. staff relation-
ships."

"I would do it regardless of total staff opposition."

"It would depend on who they were."

"I don't make decisions by voting."

"Depends on the issue."

"Too many variables dependent upon the issue."

"Function of respective competence, not numbers. Don't
believe in voting."

"I would yield to one if he/she could convince me
otherwise."

"Most difficult to answer. I have never experienced
more than 10% against me."

"Depends on the issue, their understanding of it versus
mine."

"Good management does not operate this way."

"The particular individual, and the regard in which I
hold him counts a good deal more than adding up the
numbers."

m. Question 51

Assume that for some reason a very close friend is forced to
leave the service. Some of the organizations that he has
contacted are new and although their future success is un-
certain, they offer potential salaries above that which he
is now receiving. Indicate which company you would advise your
friend to join.

	CHANCES FOR COMPANY SUCCESS	PROSPECTIVE SALARY INCREASE
A.	2 in 10	200%
B.	4 in 10	100%
C.	6 in 10	50%
D.	8 in 10	25%
E.	Survival Guaranteed	0%

"Would not advise a friend. It is his/her decision."

"I wouldn't presume to do so."

"The nature of the job with its potential for fulfillment
of that particular individual's motivations counts for
a good deal more than the two criteria from which you
asked me to choose."

n. Question 54

How frequently do you feel that you have been right when faced
with making decisions which are not backed by factual material?

A. Less than 50% of the time.
B. 50 - 60% of the time.
C. 60 - 70% of the time.
D. 70 - 80% of the time.
E. Greater than 80% of the time.

"I don't make decisions without the facts, nor does any
good manager."

o. Question 57

You and several others have been competing for a top military
position, which you highly desired and confidently expected
to receive. You were just informed that a young "tiger"
has been selected for the position, and you consider him to
be less competent than you. You have received a memo from
the retiring individual in this position to bring the new
officer up to speed. What would you do?

A. Resign.
B. Give token conformance and let the new officer meet the
    challenge on his own.
C. Accept the assignment.
D. Take time off to think about the situation.
E. Accept the assignment, while looking for a position in
    another organization.

"It has happened to us all."

      p. Question 58.

A. I feel that accepted plans should generally represent
     the ideas of my subordinates.
B. I expect subordinates to carry out plans I have prepared.

"This looks schizophrenis but I rely heavily on good
subordinates, yet don't develop close personal relation-
ships."

V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The authors were pleased with the results from the
questionnaire along with the extremely high response per-
centage. Even though limited research has been done with the
use of situational stimuli, the writers would have to con-
clude that the area is wide open for further research.
Specifically we would like to present the following conclusions
from our research:

1. Wide differences separated the two populations
studied when using situational stimuli as a means to assess
ʾtential. The populations compared were statistically
different 92% of the time when evaluated by capacity indicator
groups. Additionally the groups were statistically different
66% of the time when placed side by side on individual
question responses. Much speculation can be made concerning
these differences, however, the authors believe that the
differences may be attributed to environmental factors in
organizational settings within the two populations which are
significant enough to affect the response patterns to the
decision alternatives. Even with this in mind though, the
first hypothesis of this study is rejected.

2. Although there was much variation between the two
populations a ground level data base would have to be

151

considered established within the military environment using
the previously tested data gathering instrument. In light of
this, an analytical evaluation system has been developed as
a possible criterion for researching top military capacity.
Due to this evaluation hypothesis two is rejected.

3. Even with the variation between the populations
evaluated the authors are unable to establish whether a true
difference exists between the different levels within the
military until further testing can be done. This testing
should indicate whether top military potential can be deter-
mined through the use of situational stimuli.

B. RECOMMENDATIONS

Use of the questionnaire and its employment of situational
stimuli as a tool in identifying top leaders within the mili-
tary proved beneficial. The study did what the authors
anticipated but more work needs to be done. We, therefore,
make the following recommendations for follow-on research:

1. Administer the questionnaire to other ranks within
the military establishment in determining respective base
lines of these groups.

2. Dispense the questionnaire to cadet officers in Army
R.O.T.C. program or cadet officers in the Academy for establish-
ment of base line data in these areas.

3. Compare data of the military respondents to that of
the general population.

4. Formalize the questionnaires scoring system utilizing this study's population responses as base line and further evaluate the instrument with other groups that may be tested.

5. Further validate the test instrument by conducting interviews with selected members of the defined population in our study.

6. Compare the results of this instrument with those that may come from other executive identification procedures.

APPENDIX A
LETTER AND DATA GATHERING DOCUMENT

This appendix contains the two items used to gather data for this study. The first is the cover letter adopted to introduce the questionnaire to the 495 individuals in the defined population. The second item is the questionnaire itself which was modified from previous studies to fit the population it was being administered to.

NAVAL POSTGRADUATE SCHOOL
Monterey, California   93940

Department of Administrative Sciences   In Reply Refer to:
                                               NC 4(54Cf)/rba
                                               27 June 1981

Major General John Doe
Commanding General
USA Cavalry School
Fort Hunter, OK   73503

Dear General Doe:

     The purpose of this letter is to request your assistance in
a continuing research program regarding successful executives
in top management positions. Two Army officers are assisting
me with this study. Previous data has been collected on the
successful executives in the civilian community and I would
now like to use this same instrument with top military leaders.

     I have enclosed a short series of questions entitled "Top
Military Decision-Making." This information document asks for
basic yet specific situation decision choices. Your answers
will provide invaluable data upon which a fundamental and
unique baseline will be established. I assure you that your
personal identity and individual responses will not be released.
Only unidentified group information will be used in this study.
The success or failure of this research effort will naturally
depend upon your response.

     The enclosed series of questions should take approximately
fifteen minutes to answer. The document is divided into small
sections with pertinent instructions prior to each division.

     Thank you for your cooperation.

                                   Sincerely,

                                   J. W. Creighton
                                   Professor of Management

Enclosure

TOP MILITARY DECISION-MAKING

INSTRUCTIONS FOR COMPLETING THIS INFORMATION DOCUMENT ARE PROVIDED
BEFORE EACH SECTION.

SECTION ONE

*Please enter the most appropriate answer in the box at
the right of each question. The number preceeding the
solid vertical line corresponds to the question number
in the appropriate box or boxes. If the question calls for
a response of more than a one-digit response, please place
"ONLY" one digit per box.*

YOUR ANSWER

1. Is your present employer . . . (1) Military (2) Civilian?   1.

2. What position do you hold within your organization? (Please write out your   2.
position) If Military, please indicate position.

_____

3. Location of organization? (1) New England (2) Eastern U.S. (3) Southeast   3.
(4) North Central (5) South Central (6) Northwest (7) Southwest (8) Alaska
(9) Hawaii (10) Overseas

4. Age?   4.

5. Sex? (1) Female (2) Male   5.

6. Height? (INCHES)   6.

7. Weight? (lbs)   7.

8. Race? (1) American Indian (2) Black (3) Oriental (4) Spanish-American   8.
(5) White (6) Other (If other, please write out) _____

9. Length of time with present organization? (YEARS)   9.

10. What is your LAST level of formal education? (1) High School Diploma   10.
(2) BA (3) BS (4) MBA (5) MPA (6) Masters (7) Doctorate

11. What was your major field of study? _____   11.

12. Select the most appropriate situation that describes your Marital Status?   12.
(1) Divorced (2) Divorced and remarried (3) Married (4) Single
(5) Widow/Widower.

13. How many times have you been married? 13.

14. How many children do you have? 14.
    Sons _____ Daughters _____ None _____

15. Spouse's highest level of formal education? 15.
    (1) No Spouse   (6) 15 years
    (2) Less than 12 years   (7) 16 years
    (3) 12 years   (8) 17 years
    (4) 13 years   (9) 18 years
    (5) 14 years   (10) Greater than 18 years

16. How many times have you relocated in your career thus far? 16.
    (1) 0-5   (4) 15-20
    (2) 5-10   (5) Over 20
    (3) 10-15

17. How long have you been in the Military? (YEARS) 17.

18. What is your religious preference? (1) None (2) Catholic (3) Jewish 18.
    (4) Other (5) Protestant (Please indicate denomination) _____

19. Have you changed your religious preference? (1) Yes (2) No 19.

20. If yes, how many times? 20.

21. What is/was your father's occupation? If deceased or retired, please indicate 21.
    last occupation. _____

SECTION TWO

*Please answer the following questions in the present
tense, i.e., how would you decide today, not how you
decided in the past. Indicate your response in the box
to the right of each question. The number preceeding
the solid vertical line corresponds to the question number
in the appropriate box.*

22. Indicate the number of work-related organizations to which you hold current 22.
    membership, i.e., A.U.S.A., Airborne Association, ...

    A. 0   D. 5-6
    B. 1-2   E. More than the above
    C. 3-4

23. How many new friends have you made in the past year?   23. ☐

    A.   No need to make new friends.
    B.   1 - 2
    C.   3 - 5
    D.   6 or more.
    E.   Cannot remember exactly.

24. On the average, how many people do you see daily?   24. ☐
    (Excluding your immediate staff.)

    A.   0 - 4
    B.   5 - 8
    C.   9 - 12
    D.   12 - 16
    E.   16 or more.

25. Which of the following best describes what you usually do in making   25. ☐
    important decisions?

    A.   Make the decision and inform your boss later.
    B.   Make the decision as if it were a routine matter.
    C.   Put the problem up to those affected by the decision.
    D.   Decision-making is not my responsibility.
    E.   Take time to check with your boss.

26. Indicate which combination of words, when placed in the following sentence,   26. ☐
    would most accurately describe you:

    You hear about new work-related developments _____

    ———————————————————— most of my colleagues.

    A.   considerably before
    B.   sooner than
    C.   at about the same time as
    D.   later than
    E.   sometime after

27. Indicate the frequency with which your subordinates, peer, and/or superiors came   27. ☐
    to you in the past month for work-related information which was not a function of
    your position?

    A.   1 - 3
    B.   4 - 7
    C.   8 - 11
    D.   12 - 16
    E.   17 or more

28. In the past year, how many non-routine, work-related projects have been completed for which you supplied the original idea?

28. ☐

   A. 0
   B. 1 - 2
   C. 3 - 4
   D. 5 - 6
   E. 7 or more

29. Which of the following do you tend to rely upon most heavily as a source of initial information for work-related projects and/or problems?

29. ☐

   A. Literature - books, manuals, dissertations, and other items which are not published on a regular basis.
   B. Vendors - representatives of, or documentation generated by suppliers or potential suppliers.
   C. Personal Experience - ideas which were previously used by yourself in similar situations and recalled directly by memory.
   D. Staff - selected members of your staff who are not assigned directly to the project being considered.
   E. External Sources - sources which do not fall into any one of the categories.

30. When you hear about a new idea which may be of use to your organization, you:

30. ☐

   A. Analyze it in depth before instituting it.
   B. See how it works in other organizations.
   C. Turn it over to a person in your organization who is most likely to use it.
   D. Discuss it and its applicability at your next conference.
   E. Turn it over to a cost analyst to determine its value.

31. When information concerning major decisions are to be made, you:

31. ☐

   A. Recognize, among other things, that upward communications have little or no value to the management of the organization.
   B. Acknowledge that an important decision about decisions is when to communicate them, if at all.
   C. Insist that a decision is communicated in a language that will not antagonize its receptiveness.
   D. Recognize that some restrictions may improve organizational effectiveness.
   E. Insist that every decision be communicated in a language that leaves no doubt to the intent or spirit of the decision.

32. Indicate the total number of journals, magazines, and newspapers which you regularly read.

32. ☐

   A. 1 - 2
   B. 3 - 4
   C. 5 - 6
   D. 7 - 8
   E. 9 or more

159

33. Would you work at your present job for a lesser salary?   33. ☐

  A.   Yes
  B.   No

34. If <u>Yes</u>, by how much less?   34. ☐

  A. $ 2,000   D. $ 15,000
  B.   5,000   E.   20,000
  C.   10,000

35. If <u>No</u>, why not?   35. ☐

  A.   Money is very important to you.
  B.   You are worth what you are being paid.
  C.   For your unique skills, you will not work for less than your present salary.
  D.   Money is not a direct concern to you, but it is important to your family.
  E.   Present earning power is necessary to provide a portfolio for future security.

36. How do you feel about the time you have to do your work?   36. ☐

  A.   Have time for everything without feeling pushed.
  B.   Wish you had a little more time to plan and to think.
  C.   Necessary to keep pushing to get everything done.
  D.   Very hard to do what is expected of you in the time available.
  E.   Never seem to have enough time to do everything.

37. With respect to the amount of time you spend at "work":   37. ☐

  A.   You do not view your position as having fixed working hours.
  B.   You consider yourself as a professional that will give whatever amount of
       time is required, at the time, to accomplish the present undertaking.
  C.   As a general rule, you accomplish at least or more work outside the office
       than while working at the office.
  D.   You simply feel that working hours are for "others" and you give whatever
       time is required to accomplish a task and work at it until it is completed.
  E.   You try not to allow your outside personal interests to cause you to mis-
       manage your time.

38. Of the situations given, which of these best describes your work routine?   38. ☐

  A.   You have time in your daily routine to spend time on the unexpected.
  B.   As a general rule, your daily schedule is very heavy.
  C.   If it were not for your subordinates taking up a good part of your time, you
       would have more than enough time to expand your involvement in the
       organization.
  D.   You have no difficulty with the management of your time since you set a
       fixed and precise daily schedule, allowing time for your seniors, subordinates,
       and whatever is left belongs to you.
  E.   You are concerned with the amount of time you have to spend at the office,
       because you feel your superiors interpret this as an indicator of ineffectiveness.

160

39. You are about to propose a new policy which you feel is good for the   39.
organization. You intuitively believe, however, that you will have
difficulty convincing certain segments of the organization. You are
further aware that unless you receive almost across the board concur-
rence, it will be difficult to convince your boss to implement the policy.
How would you go about "seeing to it" that your policy is accepted?

    A.   Work around the opposition, by going directly to your superiors
and attempt to convince them of the need for your proposed
policy.

    B.   Determine who your supporters are and seek their assistance to
favorably impress the opposition.

    C.   Specifically, identify those individuals who are opposed and
attempt to convince them individually.

    D.   Ignore the opposition and continue with your new policy changes.

    E.   Postpone introduction of the policy change and wait for better timing.

40. As a decision-maker: 40.

    A.   You accept success and failure equally.

    B.   When you have failed, you have accepted the consequences and
continue on as before.

    C.   When you fail, you accept the consequences and will analyze the
causative factors thereto. Such a set back will not deter your future
efforts.

    D.   Your aim is to always succeed no matter what procedures or methods
must be employed to accomplish your objectives.

    E.   You are successful because you thoroughly investigate the parameters
surrounding the decision about to be made.

41. Assume that you are considering an officer for an extremely important and visible 41.
project. However, you consider the best among them to be a "maverick" with
respect to his management/leadership style. If you decide on selecting the "maverick"
would you?

    A.   Insist that his management/leadership style conform to present organization
policies.

    B.   Modify the organization to adjust to his management/leadership style.

    C.   Prefer to allow him to operate as he pleases so long as his performance results
are highly satisfactory.

    D.   Prefer to allow him to operate within his style, but at the appropriate time
tactfully remind him that the organization policies are sound and will prove
beneficial to him in the long run.

    E.   You would not select the "maverick."

161

42. If you have just been promoted two levels above your present position, you would function at this new level:

42. ☐

A. By proceeding cautiously before making decisions.
B. By waiting to gain confidence and with additional experience make decisions faster than when initially assigned.
C. With no delay in decision-making because earlier training and experience adequately prepared you for this increased responsibility.
D. Because in the past when assigned to a new or unfamiliar area, you had no difficulty in commanding the new job and therefore, would anticipate no delay in decision-making now.
E. By growing into the job gradually because of the scope of the position.

43. As you reflect on your career, judge the present, and postulate about the future regarding the relationship with your family, family responsibilities and demands of your present position, how would you best describe the way in which the relationship exists or developed?

43. ☐

A. Family responsibilities were/are not neglected since a mutual bond of understanding developed as you proceeded through your career, wherein the family was/is supportive of your professional goals.
B. Your family has/did not place you in a position wherein you had to choose between family or professional goals.
C. Family obligations occasionally have taken a secondary position if your professional goals and requirements of your job were to be attained. However, you attempted to make it up to the family whenever the occasion(s) allowed.
D. You attempted to make a compromise decision between family and job, but rarely sacrificed the family.
E. Sometimes, demands of the job, i.e., time sensitive issues, demanded that you put more hours on the job than you would like.

44. In a position that you feel is not exactly what you want:

44. ☐

A. You do whatever is required and receive what you believe to be only minimal personal or professional satisfaction from the results of your efforts.
B. You consider the results of your efforts to be negligible and, in fact, believe your efforts to be "dog work."
C. You consider your efforts to be professionally and personally rewarding even though you are not completely happy with your present position.
D. You have, in retrospect, almost always derived personal satisfaction from your job regardless of your personal feelings toward the assignments.
E. You do what is required, knowing or hoping that the present assignment or occupation is only a means to an end.

162

45.   You accept a specific assignment: 45. ☐

    A.   Thinking or knowing that it would be only a temporary assignment,
        carrying with it a promise or possibility that a better position would
        be available in a reasonable time.
    B.   Realizing that it was exactly what you wanted to do and had no desire
        for higher levels of aspiration.
    C.   Because of your specific or unique skills that were desired by the organiza-
        tion, who was willing to award you commensurate with your proven abilities.
    D.   Because of your unique skills that were desired by the organization but you
        also set your remuneration specific demands.
    E.   Because there were no other positions available or opportunities that suited
        you.

46.   When you take leave: 46. ☐

    A.   You find it is most beneficial to take one long leave as opposed to several
        short leaves.
    B.   You fit your leave schedule into what the organization will allow you to
        take.
    C.   You find it best to schedule your leave with the needs and desires of your
        family.
    D.   You do not take long leaves (more than two weeks) because you recognize
        that you will have to work twice as hard to catch up on your work when
        you return.
    E.   You take leaves only for reasons of health.

47.   How good is your health?   47. ☐

    A.   Poor — need rest and, or medical treatment to attack the rigorous daily
        business activity.
    B.   Based upon your judgement and substantiated by your physician's evaluation,
        you are in good health for your age.
    C.   Based upon your judgement and supported by your physician's evaluation,
        you are in better health than others of your age.
    D.   Fair — you recognize the need to keep yourself physically toned up, but your
        demanding schedule has precluded you from adhering to a set exercise schedule.
    E.   Perfect — can drive hard on any job, night or day.

SECTION THREE

Please answer the following questions in the present tense, i.e., how would you decide today, not how you decided in the past. Indicate your response in the box to the right of each question. The number preceeding the solid vertical line corresponds to the question number in the appropriate box.

YOUR ANSWER

48. You have decided to fire an officer who is a personal friend. Which best describes 48. what you would do?

   A. Discuss the matter with him over the telephone.
   B. Delegate the act of termination to someone else.
   C. Delay notification until an opportune time.
   D. Write a memo specifying the termination and its reasons.
   E. Discuss the matter with him directly.

49. Select the one situation which causes you the most conflict: 49.

   A. Your family accuses you of being married to your job, and demands more time with you.
   B. You have been directed to reorganize your activity to a mode you objected to in the past.
   C. Your organization expects you to violate your personal ethics.
   D. Your subordinate directly countermands your directions, however, his actions have led to increased effectiveness.
   E. You have a difference of opinion with your next higher command on the goals and objectives of the organization you head.

50. Your staff of ten members disagrees with you on an issue in which you strongly 50. believe. What is the highest level of opposition that you would tolerate before yielding to the staff?

	FOR		AGAINST
A.	0	—	10
B.	2	—	8
C.	3	—	7
D.	4	—	6
E.	5	—	5
F.	Would not yield no matter what the opposition.		

51. Assume that for some reason a very close friend is forced to leave the service. 51. Some of the organizations that he has contacted are new and although their future success is uncertain, they offer potential salaries above that which he is now receiving. Indicate which company you would advise your friend to join.

CHANCES FOR COMPANY SUCCESS	PROSPECTIVE SALARY INCREASE
A. 2 in 10	200%
B. 4 in 10	100%
C. 6 in 10	50%
D. 8 in 10	25%
E. Survival Guaranteed	0%

52. You are project manager for a new weapons system. The time and political mood is right for 52. procurement of this system but you know that another more advanced system is also being developed. There is a high probability that the political mood will shift before development of the new system. What do you do?

A. Do more research before making a decision.
B. Limit buying of new system until more is learned on advanced system.
C. Pursue the more advanced system no further.
D. Invest more effort in the more advanced system.
E. Transfer the decision on what to do to your boss.

53. Indicate the one best description of your actions while working under tight time constraints 53. for a considerable period.

A. You delegate part of your tasks.
B. You continually seek additional tasks to be performed.
C. You set aside part of the work for another time.
D. You set up a priority for the tasks, then follow the priority.
E. You are still open to ideas for additional tasks.

54. How frequently do you feel that you have been right when faced with making decisions 54. which are not backed with factual material?

A. Less than 50% of the time.
B. 50 — 60% of the time.
C. 60 — 70% of the time.
D. 70 — 80% of the time.
E. Greater than 80% of the time.

55. Imagine you manage a medium sized construction firm and recently learned of a new 55. building material which is used extensively in Europe but has never been adopted in the United States. The building material appears to have several advantages in terms of substantial cost reduction, superior insulation qualities, and relative ease in construction as compared to its counterpart in the United States.

After a thorough investigation, one of your engineers obtained extensive and reliable information on the characteristics, costs, and advantages of the new material. Further, your company could easily obtain exclusive manufacturing rights for use in the United States.

Indicate which of the following would best describe your approach to the building material.

165

A. Utilize the new idea in the firm's next major building project so as to take advantage of the substantial cost savings.
B. Use the building material in one of the firm's small, local building projects so as to test its acceptance.
C. Construct a non-commercial prototype.
D. Engage the services of an independent consultant.
E. Wait until the building material has received considerable commercial application in the United States.

56. It has been brought to your attention that two of your key people have had a fight. The conflict continues to adversely affect the performance of their departments. What would you do?

A. Attempt to resolve the issue with each individual separately.
B. Do not get involved; let them resolve the issue themselves.
C. Call a conference to identify issues and resolve differences.
D. Direct them to drop the issue and get on with business.
E. Listen to the case, make judgement, and take appropriate action.

56. ☐

57. You and several others have been competing for a top military position, which you highly desired and confidently expected to receive. You were just informed that a young "tiger" has been selected for the position, and you consider him to be less competent than you. You have received a memo from the retiring individual in this position to bring the new officer up to speed. What would you do?

A. Resign.
B. Give token conformance and let the new officer meet the challenge on his own.
C. Accept the assignment.
D. Take time off to think about the situation.
E. Accept the assignment, while looking for a position in another organization.

57. ☐

*Please think about what you do in your job
in relation to handling subordinates. Indicate
in the box to the right the one that best de-
scribes what you do.*

58. A. I feel that accepted plans should generally represent the ideas of my subordinates
  OR B. I expect subordinates to carry out plans I have prepared.

58. ☐

59. A. I am not so concerned with establishing close personal relationships as in getting subordinates to follow my example.
  OR B. I develop a close personal relationship with subordinates because I believe this marks out a good manager.

59. ☐

60. A. I believe that firm discipline is a most important element to keep work moving.
  OR B. Firm discipline should only be enforced occasionally, because it often does more harm than good.

60. ☐

166

61. A.   I am constantly concerned with high standards of performance and encourage   61. ☐
          subordinates to reach these standards.
  OR B.   When a subordinate fails to perform I let him know of the failure in a firm
          and reasoned manner.

62. A.   I think that subordinates should be able to overcome difficulties in the way of   62. ☐
          achievement themselves.
  OR B.   When alternatives are described to me I am not long in indicating the course of
          action I prefer.

63. A.   When I make a decision, I take the additional step of persuading my subordinates 63. ☐
          to accept it.
  OR B.   I believe that subordinates should not be too discouraged by setbacks in the job,
          but rather should be able to clear blockages themselves.

64. A.   In the long run, I will fire a man I consider to be unmanageable.   64. ☐
  OR B.   I discourage arguments which upset the harmony amongst subordinates.

65. A.   I reward good work and feel that punishment for non-performance has limited   65. ☐
          use.
  OR B.   When I discipline a subordinate I am definite in letting him know what he has
          done wrong.

APPENDIX B

CODE BOOK

1. The following gives a description of how the questionnaire
was coded for use in the SPSS system's packet.

a. Alpha responses were coded to numeric using the
following system:

A = 1

B = 2

C = 3

D = 4

E = 5

F = 6

b. Questions that required a single box response that
were not responded to were coded with the number 9 (nine).

c. Questions that required a double box response that
were not answered or were answered incorrectly for that
question were coded with a -1 (negative one).

d. Responses for each individual used a total of two
computer cards. Each set of cards was given a three-digit
number and this number was placed at the end of the card
column along with a number 1 or 2 denoting which card it was,
for that one person.

2. The section below gives the card column, question number,
item description and code along with the variable label for

that question. This procedure will permit easy coding should

the authors need such information in the future or anyone

else desires to use this data or need to interpret it.

Card Column	Question	Item and Code	Variable Name
1	1	Present Employer 1 = Military 2 = Civilian	Employer
2	2	Organizational Position 1. Commander 2. Deputy Commander 3. Staff 4. Director 5. Project/Program Manager	Position
3-4	3	Location of Organization 1. New England 2. Eastern U.S. 3. Southeast 4. North Central 5. South Central 6. Northwest 7. Southwest 8. Alaska 9. Hawaii 10. Overseas	Location

Card Column	Question	Item and Code	Variable Name
5-6	4	Age - Numbers represent age of individual.	Age
7	5	Sex 1. Female 2. Male	Sex
8-9	6	Height - given in inches	Height
10-11-12	7	Weight - given as three digits	Weight
13	8	Race 1 = American Indian 2 = Black 3 = Oriental 4 = Spanish/American 5 = White 6 = Other	Race

Card Column	Question	Item and Code	Variable Name
14-15	9	Length of Time with present organization in years	Org time
		1 = 01	
		2 = 02	
		3 = 03	
		Then any double digit	
16	10	Last level of formal education	Educ
		1 = High School diploma	
		2 = B.A.	
		3 = B.S.	
		4 = M.B.A.	
		5 = M.P.A.	
		6 = Masters	
		7 = Doctorate	
17	11	Major field of study	Study
		1 = Hard Science/ Engineering	
		2 = Hard Science/Other	
		3 = Soft Science	
		4 = Business	
		5 = Overlapping Fields	
		6 = Misc	

172

Card Column	Question	Item and Code	Variable Name
18	12	Marital Status 1 = Divorced 2 = Divorced and Remarried 3 = Married 4 = Single 5 = Widow/Widower	Married
19	13	Number of times married - Single digit response 1, 2, ... 9	Times
20-21-22	14	Number of Children Sons in C.C. 20 Daughters in C.C. 21 None in C.C. 22 i.e., 2-3-0 = 2 sons 3 daughters 1-1-0 = 1 son 1 daughter 0-0-0 = no children	Children
23-24	15	Spouse's highest level of education 1 = no response = 01 2 = less than 12 years = 02 3 = 12 yrs = 03 4 = 13 yrs = 04	Spoused

Card Column	Question	Item and Code	Variable Name
		5 = 14 yrs = 05	
		6 = 15 yrs = 06	
		7 = 16 yrs = 07	
		8 = 17 yrs = 08	
		9 = 18 yrs = 09	
		10 = greater than 18 yrs = 10	
25-26	16	Number of times relocated in career	Relocate
		01 = 0 to 5 times	
		02 = 5 to 10 times	
		03 = 10 to 15 times	
		04 = 15 to 20 times	
		05 = over 20 times	
27-28	17	Number of years in military - double digit response	Yrsmil
29	18	Religious Preference	Religion
		1 = None	
		2 = Catholic	
		3 = Jewish	
		4 = Other	
		5 = Protestant	
30	19	Have you changed religious preference	Chgrel
		1 = yes	
		2 = no	

Card Column	Question	Item and Code	Variable Name
31	20	If they have changed religion they will enter digit for how many times. If not they will enter 0.	Chgtimes
32	21	Father's Occupation 1 = Blue Collar 2 = High Professional 3 = Low Professional 4 = White Collar 5 = Agriculture 6 = Other/Military Officer	Occfath
33	22	Number of work related organizations you belong to 1 = 0 2 = 1-2 3 = 3-4 4 = 5-6 5 = more than 6	Orgmemb
34	23	Friends made in past year 1 = no new friends 2 = 1-2 3 = 3-5 4 = 6 or more 5 = cannot remember exactly	Friends

Card Column	Question	Item and Code	Variable Name
35	24	How many people do you see daily? 1 = 0-4 2 = 5-8 3 = 9-12 4 = 12-16 5 = more than 16	Contact
36	25	What you usually do in making decision. 1 - Make it and inform boss later 2 = Make it as if routine 3 = put problem before those affected by decision 4 = decision making not my responsibility 5 = Take time and check with boss	Decide
37	26	You hear about work related developments ____ subordinates. 1 = considerably before 2 = sooner than 3 = about the same time 4 = later than 5 = sometime after	Timeinf

Card Column	Question	Item and Code	Variable Name
38	27	Number of times subordinates came to you in past month for work related info not part of your position 1 = 1-3 2 = 4-7 3 = 8-11 4 = 12-16 5 = 17 or more	Freqinf
39	28	In the past year how many new routine, work related projects have been completed in which you supplied the original idea? 1 = 0 2 = 1-2 3 = 3-4 4 = 5-6 5 = 7 or more	Idea
40	29	Source of initial information 1 = Literature 2 = Vendors 3 = Personal Experience 4 = Staff 5 = External Sources	Sourcinf

Card Column	Question	Item and Code	Variable Name
41	30	New idea in your organization, you...	Newidea
		1 = Analyze in depth	
		2 = See how it works in other organizations	
		3 = Turn it over to person most likely to use in your org	
		4 = Discuss applicability at next conference	
		5 = Turn over to cost analyst	
42	31	What do you do with information concerning major decisions?	Communic
		1 = Upward Communications have little value	
		2 = What important is when to communicate	
		3 = Communicate in language that is not antagonizing	
		4 = Restrictions may improve organization	
		5 = Communicate in language that leaves no doubt about decision	

Card Column	Question	Item and Code	Variable Name
43	32	Journals and Magazines you read 1 = 1-2 2 = 3-4 3 = 5-6 4 = 7-8 5 = 9 or more	Journal
44	33	Would you work at your present job for lesser salary? 1 = yes 2 = no	Lessal
45	34	If they answer 1 above the following applies as to how much less would they work for. 1 = 2,000 dollars 2 = 5,000 dollars 3 = 10,000 dollars 4 = 15,000 dollars 5 = 20,000 dollars If they answered 2 above a "0" will be in this box	Amount

Card Column	Question	Item and Code	Variable Name
46	35	If they answered 2 in CC 44 then the following applies.	Worth
		1 = money important	
		2 = worth what being paid	
		3 = unique skills worth money now paid	
		4 = money important to family	
		5 = present salary necessary for future	
		If they answered 1 in CC 44, this block will have a "0" in it	
47	36	Feelings about time to do work	Timelim
		1 - Time for everything. Not pushed.	
		2 - Would like more time to plan and think	
		3 - Need to keep pushing to get everything done	
		4 - Hard to do what's expected in time alloted	
		5 = Never have enough time to do everything	

Card Column	Question	Item and Code	Variable Name
48	37	With respect to time you spent at work	Flextime
		1 = Your position has no fixed working hours	
		2 = Professional - give what time necessary	
		3 = Accomplish more work outside the office	
		4 = Working hours for others - You give what's needed	
		5 = Do not let outside interests cause you to mismanage time.	
49	38	Situations describing work routine	Situated
		1 = Have time for unexpected	
		2 = As a rule schedule very heavy	
		3 = Subordinates take a great deal of time otherwise would have enough	
		4 = Very organized schedule for everything	
		5 = Time at office important because seniors view it as such	

Card Column	Question	Item and Code	Variable Name
50	39	Want new policy but there is opposition. What do you do?	Policy
		1 = Work around it by going to superiors	
		2 = Gather support-ers and try to convince oppo-sition	
		3 = Identify opposi-tion and try to convince indi-vidually	
		4 = Ignore opposi-tion and march on	
		5 = Postpone policy and wait for better time	
51	40	As a decision maker	Accept
		1 = Accept success/ failures equally	
		2 = Accept conse-quences of fail-ure and march on as before	
		3 = Accept failure but analyze causes	
		4 = Aim to succeed no matter what	
		5 = You're successful because you ana-lyze parameters before decision	

Card Column	Question	Item and Code	Variable Name
52	41	Selecting "maverick" for important slot whose style is not like everyone else's: you...	Maverick
		1 = Select maverick but insist he change leadership style	
		2 = Select maverick and adjust organization to his style	
		3 = Select maverick and allow him to operate as long as performance good	
		4 = Select maverick but at appropriate time inform him that change would be better for him in long run	
		5 = Don't select maverick	
53	42	Promoted two levels above position, how do you function?	Promoted
		1 = Proceed cautiously before making decision	
		2 = Wait to gain confidence and experience, then make fast decision	

Card Column	Question	Item and Code	Variable Name
		3 = No delay in decision making because of fast training	
		4 = With other un- familiar position I had no trouble so none should occur now	
		5 = Grow into job gradually	
54	43	Relationship with family in looking back over career and in future	Relation
		1 = Family not neg- lected because of understanding and support	
		2 = Family didn't place me in posi- tion to choose between them and job	
		3 = Family has some- times taken 2nd place but quickly made up for it	
		4 = Compromise be- tween family and job but rarely sacrificed family	
		5 = Job required me to put more hours at job than I would have liked	

Card Column	Question	Item and Code	Variable Name
55	44	In a position you feel is not exactly what you want	Undespos

1 = Do what is required to be only minimally satisfied

2 = Your efforts and results are negligible and like dog work

3 = Your efforts professionally rewarding no matter what the job

4 = Always derive personal satisfaction from job

5 = You do what's required in job because it's a means to an end

Card Column	Question	Item and Code	Variable Name
56	45	You accept a specific assignment:	Assign

1 = Thinkint it's only temporary with promise of better position in time

2 = Knowing it's exactly what you wanted and have no desire for future aspiration

3 = Because of your unique skills the organization awarded you

Card Column	Question	Item and Code	Variable Name
		4 = Because of your unique skills you have been rewarded but you also set other demands	
		5 = Because there were no other positions available at the time	
57	46	When you take leave:	Leave
		1 = You take a long one rather than several short ones	
		2 = Fit leaves into what organization will allow	
		3 = Schedule your leaves around family desires	
		4 = You don't take long leaves because you'll have to work twice as hard when you return	
		5 = You take leave for health reasons	
58	47	How good is your health?	Health
		1 = Poor - need rest	
		2 = You're in good health for your age	
		3 = You're in better health than others your age	

Card Column	Question	Item and Code	Variable Name
		4 = Fair - you know you need to do more for health but job precludes it	
		5 = Perfect - can drive hard night and day	
59	48	You decided to fire officer who is personal friend. What do you do?	Fire
		1 = Discuss it with him over phone	
		2 = Delegate act of termination tc someone else	
		3 = Delay notification until opportune time	
		4 = Write memo specifying termination	
		5 = Discuss it with him directly	
60	49	Select situation which causes you most conflict.	Conflict
		1 = Family accuses you of being married to your job	
		2 = You are directed to reorganize to mode you objected to in the past	

Card Column	Question	Item and Code	Variable Name
		3 = Organization expects you to violate personal ethics	
		4 = A subordinate violates your directions but it leads to increased effectiveness	
		5 = You have difference of opinion with next higher command on goals and objectives of organization	
61	50	Your staff disagrees with you on issue. What is highest level of opposition you will tolerate before yielding? 1=0(For) 10(Against) 2=2(For) 8(Against) 3=3(For) 7(Against) 4=4(For) 6(Against) 5=5(For) 5(Against) 6=Would not yield	Oppose
62-63-64	None	Individual's return as 3 digit number	Case
65	None	Card Number 1 End of first Card	Card

Second Card for Individual

Card Column	Question	Item and Code	Variable Name
1	51	Friend must leave service. Organizations contact him and offer salaries above what he is now getting but companies' futures are uncertain. Which would you advise him to join?	Advise
		(Success) (Sal Inc)	
		1=2 in 10 200%	
		2=4 in 10 100%	
		3=6 in 10 50%	
		4=8 in 10 25%	

		5=Survival 0%
		  guaran-
		  teed	

2	52	Your project manager of your system looks good but new advanced system is also being developed. What do you do?	Procure
		1 = Do more research before making decision	
		2 = Limit buying of your system until more is learned on advanced system	
		3 = Pursue advanced system no further	

Card Column	Question	Item and Code	Variable Name
		4 = Invest more effort in advanced system	
		5 = Transfer decision on what to do to your boss	
3	53	Indicate the best description of your actions when working under tight time constraints for a considerable period of time.	Pressure
		1 = Delegate part of your tasks	
		2 = Continually seek additional tasks	
		3 = Set aside part of the work for another time	
		4 = Set up priority for tasks, then follow it	
		5 = Still open to ideas for additional tasks	
4	54	How frequently do you feel you have been right in making decisions that were not backed by factual material?	Correct
		1 = Less than 50% of the time	
		2 = 50-60% of the time	
		3 = 60-70% of the time	
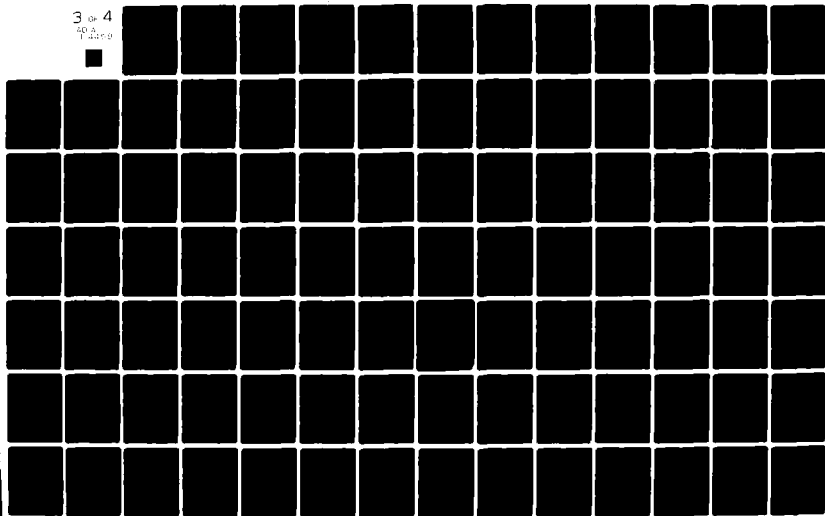
Card Column	Question	Item and Code	Variable Name
		4 = 70-80% of the time	
		5 = Greater than 80% of the time	
5	55	What do you do with new building material that has only been used in Europe but you know it's good and you could get exclusive rights to use it in US?	Material
		1 = Utilize material at your firm's next major job	
		2 = Use materials at small job to test acceptance	
		3 = Construct non-commercial prototype	
		4 = Use independent consultant	
		5 = Wait till material comes into US commercially	
6	56	Two key people had a fight and it still adversely affects the organization. What do you do?	Fight
		1 = Attempt to resolve it by talking to them individually	
		2 = Don't get involved. Let them solve it.	

Card Column	Question	Item and Code	Variable Name
		3 = Call a con- ference to identify issues and resolve conflicts	
		4 = Direct them to drop issue and get on with business	
		5 = Listen to case, make judgment, and take appro- priate action	
7	57	You feel you are directly in line for a top position but another officer re- ceives it. You are now told to break the new guy in. What do you do?	Pastover
		1 = Resign	
		2 = Give token per- formance but let him meet his own challenges	
		3 = Accept the assign- ment	
		4 = Take time off to think about situation	
		5 = Accept the assign- ment but look for another job	
8	58	1 = Accepted plans generally repre- sent ideas of my subordinate	Subord

Card Column	Question	Item and Code	Variable Name
		2 = I expect subordinates to carry out plans I have prepared	
9	59	1 = I'm not concerned with establishing close personal relationships with subordinates as I am with them following my direction	Personal
		2 = I develop close personal relationships because it is a mark of a good manager	
10	60	1 = Firm discipline is most important element in keeping work moving	Discipl
		2 = Firm discipline should only be enforced occasionally because it often does more harm than good	
11	61	1 = I'm constantly concerned with high performance standards and encourage subordinate to reach them	Perform
		2 = When a subordinate fails I let him know in a firm and reasoned manner	

Card Column	Question	Item and Code	Variable Name
12	62	1 = Subordinate should overcome difficulties in a way of achievement themselves	Act
		2 = When alternatives are described to me I'm not long in indicating the course of action	
13	63	1 = When I make decision I take additional steps of persuading subordinates to accept it	Persuade
		2 = Subordinates should not be discouraged by setbacks and be able to clear blockages themselves	
14	64	1 = In the long run I will fire a man I consider to be unmanageable	Harmony
		2 = I discourage arguments which upset the harmony amongst subordinates	
15	65	1 = I reward good work and feel punishment for now performance has limited use	Punish

Card Column	Question	Item and Code	Variable Name
		2 = When I discipline subordinate I'm definite in letting him know what he has done wrong	
16-17-18	None	Identify with three digits which card it is	Casx
19	None	2nd card on individual	Carx

APPENDIX C

POSITION AND OCCUPATION GROUPINGS

Questions 2, 11, 18 and 21 of the test instrument requested that each individual in the defined population write in specific biographical information. A wide range of responses was anticipated from setting the question up in this manner. The data received in question 2 was recorded in five groups that were determined appropriate by the authors. These groupings were asserted upon positions that were either similar in responsibility or substance. Information received in question 11 was grouped according to academic disciplines and included an overlapping and miscellaneous grouping. In question 18 the authors requested the respondents to write out the specific denomination to which they were associated with within the Protestant faith. Question 21 was designed by previous researchers to investigate socio-economic mobility as well as relationships between father-son occupations. The authors of this study added a sixth grouping in which those respondents who stated that their fathers were retired military were grouped. Some of the categorization was done according to what the authors judged appropriate as to what grouping the father's occupation fell into.

The following provides information as to the groupings used and some examples that fell into each:

Question #2: Position held within organization

Group 1 - Commander
- Division Commander
- Post Commander
- Commander
- Corps Commander

Group 2 - Assistant Commander
- Assistant Division Commander
- Deputy Assistant
- Deputy Commander

Group 3 - Staff
- Chief-of-Staff
- Inspector General
- Logistics Head
- Transportation/Engineer
- Foreign Attaches

Group 4 - Director
- Public Relations Director
- Director of Programs

Group 5 - Porject/Program Managers
- Weapons Project Manager
- Programs Chief

Question #11 - Major field of study

Group 1 - Hard Science (Engineering)

- Aero Engineering

- Civil Engineering

- Mechanical Engineering

- Engineering Science

Group 2 - Hard Science (Other)

- Medicine

- Physics

- Chemistry

- Dentistry

Group 3 - Soft Science

- International Affairs

- Political Science

- Education

- Communications

- Economics

- Law

Group 4 - Business

- Public Administration

- Management

- Business Administration

- Business

- Marketing

Group 5 - Overlapping Fields

- Civil Engineering and Law

- Aero Engineering and Public Administration

- Engineering and International Affairs

- Engineering and Physics

- ORSE and Economics

Group 6 - Miscellaneous

- Forestry

- Soil Mechanics

- Municipal Government

Question #18: Protestant Denomination (actual number)

Lutheran (12)

Christian (2)

Non-Denomination (72)

Episcopal (52)

Methodist (37)

Presbyterian (23)

Baptist (29)

Question #21: Father's Occupation

Group 1 - Blue Collar

- Laborer

- Carpenter

- Miner

- Mechanic

- Construction

- Truck Driver

Group 2 - High Professional

- Doctor

- Dentist

- Engineer

- Lawyer

- Executive

- CPA

Group 3 - Low Professional

- Broker

- Consultant

- Business Manager

- Editor

- Owner of Business

Group 4 - White Collar

- Salesman

- Foreman

- Merchant

- Civil Service

- Government Employee

Group 5 - Agriculture

- Farmer

- Rancher

- Soil Conservationist

<u>Group 6</u> - Military

      - Army Officer

      - Army General

      - Naval Officer

      - Air Force Officer

APPENDIX D

CHI-SQUARE TEST RESULTS

The Chi-square statistical test was used to determine
the significance of difference between the civilian executives
(data from previous study) and the military generals surveyed
in our study. The null hypothesis under test was that the
two independent groups, executives (population A) and
generals (population B), would respond the same with respect
to capacity indicator groups. To test this hypothesis the
number of responses to each part of a questionnaire was
counted for each group. The proportion of responses from
population A was then compared with the proportion of
responses from population B.

The null hypothesis was tested by the Chi-square distri-
bution:

$$X^2 = \sum_{i=1}^{R} \sum_{j=1}^{K} \frac{(Oij - Eij)^2}{Eij}$$

where

Oij = observed number of cases categorized in the ith
row of the jth column.

Eij = number of cases expected under Ho to be categorized
in the ith row of the jth column.

The values of X^2 yielded by the formula are distributed approximately as Chi-square with df = (R-1)(K-1), where R = the number of rows and K = the number of columns in the contingency table.

The expected values for each cell (Eij) were found by multiplying the two marginal totals common to a particular cell and then by dividing this product by the total number of cases. If the observed values are in close agreement with the expected values, the difference (Oij - Eij) will be small, and consequently the value of X^2 will be small. However, if some or many of the differences are large, then the value of X^2 will also be large. The larger X^2 the more likely it is that the two groups differ with respect to the capacity indicators' groups. It should be noted that the test will only tell whether or not the two groups are dissimilar. It will not tell the degree of association or the direction of dependency.

Comparison by Capacity Indicator

Legend:

R = Response

A = Population Executive

B = Population Army Generals

T = Total Number of Responses

X^2 = Value between Populations

C = Comparison between Pop Exec and Army Generals

S = Same

D = Difference

Desire for Power

	R	A	B	T	X^2	C
Q. 58	1	39(44.71)	266(260.29)	305	.85	
	2	17(11.29)	60(65.71)	77	3.38	
		56	326	382	4.23	D
Q. 60	1	38(32.08)	189(194.91)	227	1.27	
	2	16(21.91)	139(133.09)	155	1.86	
		54	328	382	3.13	S
Q. 61	1	33(37.28)	222(217.71)	255	.58	
	2	23(18.71)	105(109.28)	128	1.15	
		56	327	383	1.73	S

	R	A	B	T	x^2	C
Q. 62	1	19(16.13)	91(93.87)	110	.60	
	2	37(38.87)	235(232.13)	272	.12	
		56	326	382	.72	S
Q. 63	1	39(35.13)	200(203.87)	239	.50	
	2	17(20.87)	125(121.13)	142	.84	
		56	325	381	1.35	S
Q. 64	1	46(44.33)	258(259.67)	304	.07	
	2	10(11.67)	70(68.33)	80	.28	
		56	328	384	.35	S
Q. 65	1	29(21.60)	121(128.40)	150	2.96	
	2	26(33.40)	206(198.60)	232	1.91	
		55	327	382	4.87	D

Rewarding Family Life

	R	A	B	T	x^2	C
Q. 12 (Marital Status)	1	4(3.54)	9(9.46)	13	.08	
	1.45 2	14(8.18)	16(21.82)	30	5.69	
	3	106(112.28)	306(299.72)	412	.48	
		124	331	455	6.25	D
Q. 13 (# Times Married)	1	99(110.43)	305(293.57)	404	1.63	
	2&3	24(12.57)	22(33.43)	46	14.30	
		123	327	450	15.93	D
Q. 43 (Rela- tion)	1	40(39.36)	104(104.64)	144	.01	
	2	24(20.77)	52(55.23)	76	1.19	
	3	30(36.90)	105(98.10)	135	1.78	
	4	11(4.65)	6(12.35)	17	11.94	
	5	18(21.32)	60(56.68)	78	.52	
		123	327	450	15.44	D

Ability under Stress

	R	A	B	T	X^2	
Q. 53 (Pressure)	1	20(21.71)	132(130.29)	152	.16	C
	2&3	4(2.00)	10(12.00)	14	2.33	
	4	24(24.57)	148(147.43)	172	.02	
	5	7(6.71)	40(40.29)	47	.01	
		55	330	385	2.52	
Q. 57 (Past-over)	1,2,4	4(2.24)	13(14.76)	17	1.59	S
	3	23(36.28)	252(238.72)	275	5.60	
	5	23(11.48)	64(75.52)	87	13.32	
		50	329	379	20.51	

Ability to Manage Time

	R	A	B	T	X^2	
Q. 36 (Time Lim)	1	26(19.95)	47(53.05)	73	2.52	D
	2	49(42.64)	107(113.36)	156	1.31	
	3	20(22.41)	62(59.59)	82	.36	
	4	2(11.48)	40(30.52)	42	10.77	
	5	26(26.51)	71(70.49)	97	.01	
		123	327	450	14.97	
Q. 37	1	35(26.63)	62(70.37)	97	3.63	D
	2	60(77.15)	221(203.85)	281	5.26	
	3	2(2.47)	7(6.53)	9	.12	
	4	20(14.00)	31(37.00)	51	3.54	
	5	6(2.74)	4(7.25)	10	5.34	
		123	325	448	17.89	

	R	A	B	T	x^2	C
Q. 38 (Situated)	1	74(54.67)	126(145.33)	200	9.41	C
	2	44(57.67)	167(153.33)	211	4.46	
	3,4,5	5(10.66)	34(28.34)	39	4.14	D
		123	327	450	18.01	

Health

	R	A	B	T	x^2	
Q. 47	1	2(.82)	1(2.18)	3	2.34	
	2	56(40.45)	92(107.55)	148	8.23	
	3	35(51.39)	153(136.61)	188	7.19	
	4	14(7.38)	13(19.62)	27	8.17	
	5	16(22.96)	68(61.04)	84	2.90	D
		123	327	450	28.83	

Communicative Ability

	R	A	B	T	x^2	
Q. 22 (Org Memb)	1	7(2.43)	2(6.57)	9	11.77	
	2	24(23.23)	62(62.77)	86	.03	
	3	39(53.21)	158(143.79)	197	5.20	
	4	26(26.20)	71(70.80)	97	0.00	
	5	25(15.94)	34(43.06)	59	7.06	D
		121	327	448	24.06	

	R	A	B	T	x^2	
Q. 23 (Friends)	1&2	9(7.90)	20(21.10)	29	.21	
	3	28(17.43)	36(46.57)	64	8.81	
	4	61(78.97)	229(211.03)	290	5.62	
	5	24(17.70)	41(47.30)	65	3.08	D
		122	326	448	17.72	

R	A	B	T	x^2	
Q. 24 (Con-tacts)					C
1	13(4.05)	2(10.95)	15	27.09	
2	46(25.10)	47(67.90)	93	23.84	
3	30(25.64)	65(69.36)	95	1.02	
4	15(15.92)	44(43.08)	59	.07	
5	18(51.28)	172(138.72)	190	29.58	
	122	330	452	81.60	
Q. 31 (Com-munic)					D
1&2	20(15.80)	37(41.20)	57	1.54	
3	15(15.25)	40(39.75)	55	.01	
4	6(5.00)	12(13.01)	18	.28	
5	76(80.95)	216(211.04)	292	.42	
	117	305	422	2.25	
Q. 32					S
1&2	13(21.47)	66(57.53)	79	4.59	
3	39(42.66)	118(114.34)	157	.31	
4	24(20.65)	52(55.35)	76	.78	
5	46(37.22)	91(99.77)	137	2.84	D
	122	327	449	8.52	

Decision Making Capability

R	A	B	T	x^2	
Q. 25 (Decide)					C
1	17(38.86)	126(104.14)	143	16.89	
2	62(47.55)	113(127.45)	175	6.03	
3	39(27.17)	61(72.83)	100	7.07	
4&5	4(8.42)	27(22.58)	31	3.19	D
	122	327	449	33.18	

	R	A	B	T	X^2	C
Q. 39 (Policy)	1&5	6(4.24)	11(12.76)	17	.97	
	2	22(21.45)	64(64.56)	86	.02	
	3	71(76.32)	235(229.68)	306	.49	
	4	9(5.99)	15(18.01)	24	2.02	
		108	325	433	3.05	S
Q. 40 (Accept)	1	18(12.32)	28(33.68)	46	3.58	
	2	9(7.23)	18(19.76)	27	.59	
	3	73(79.02)	222(215.98)	295	.63	
	4	2(1.61)	4(4.39)	6	.13	
	5	18(19.82)	56(54.18)	74	.23	
		120	328	448	5.16	S
Q. 41 (Maverick)	1	3(7.06)	23(18.94)	26	3.20	
	2	5(11.68)	38(31.32)	43	5.25	
	3	37(36.14)	96(96.86)	133	.28	
	4	72(55.70)	133(149.30)	205	6.55	
	5	5(11.41)	37(30.59)	42	4.94	
		122	327	449	20.22	D
Q. 42 (Promoted)	1	14(8.53)	23(28.47)	37	4.56	
	2	22(13.84)	38(46.16)	60	6.25	
	3	21(26.98)	96(90.02)	117	1.72	
	4	29(37.36)	133(124.64)	162	2.43	
	5	12(11.30)	37(37.70)	49	.06	
		98	327	425	15.02	D
			Psyche/Status			
Q. 33 (Lessal)	1	80(62.67)	151(168.33)	231	6.58	
	2	41(58.32)	174(156.67)	215	7.06	
		121	325	446	13.64	D

Job Security appears as a subsection label between Q.44 and Q.46. Reaction to Conflict appears as a subsection label between Q.46 and Q.49.

	R	A	B	T	x^2	C
Q. 35 (North)	1	1(.55)	2(2.45)	3	.45	D
	2	21(14.90)	60(66.10)	81	3.06	
	3	9(6.25)	25(27.75)	34	1.48	
	4	4(9.93)	50(44.07)	54	4.34	
	5	4(7.36)	36(32.64)	40	1.88	
		39	173	212	11.21	
Q. 44	1&2	6(3.88)	9(11.12)	15	1.56	D
	3	18(24.04)	75(68.96)	93	2.05	
	4	71(76.26)	224(218.74)	295	.49	
	5	19(9.82)	19(28.18)	38	11.57	
		114	327	441	15.67	
Q. 46 (Leave) — Job Security	1	23(9.38)	11(24.62)	34	27.31	D
	2	36(59.62)	180(156.38)	216	12.92	
	3	39(33.67)	83(88.33)	122	1.16	
	4&5	24(19.32)	46(50.68)	70	2.56	
		122	320	442	43.95	
Q. 49 (Conflict) — Reaction to Conflict	1	9(6.20)	41(43.80)	50	1.44	S
	2	5(3.97)	27(28.03)	32	.31	
	3	21(22.56)	161(159.44)	182	.12	
	4&5	10(12.27)	89(86.73)	99	.48	
		45	318	363	2.35	

Courage to Commit Resources

	R	A	B	T	x^2	
Q. 56 (Fight)	1	13(7.25)	37(42.75)	50	5.33	C
	2&4	1(2.61)	17(15.39)	18	1.16	
	3	17(15.81)	92(93.19)	109	.10	
	5	25(30.32)	184(178.68)	209	1.09	
		56	330	386	7.68	S
Q. 51 (Advise)	1	4(5.67)	36(34.33)	40	.57	
	2	4(11.19)	75(67.81)	79	5.38	
	3	22(24.94)	154(151.06)	176	.40	
	4	22(10.20)	50(61.80)	72	15.90	D
		52	315	367	22.25	
Q. 52 (Procure)	1	10(10.68)	69(68.32)	79	.05	
	2	1(20.41)	150(130.59)	151	21.34	
	3	3(3.24)	21(20.76)	24	.02	
	4	32(13.11)	65(83.89)	97	31.47	D
	5	4(2.57)	15(16.43)	19	.92	
		50	320	370	53.80	
Q. 55 (Material)	1	9(15.67)	101(94.33)	110	3.31	
	2	40(33.34)	194(200.66)	234	1.55	
	3	3(2.70)	16(16.29)	19	.04	
	4	1(1.85)	12(11.15)	13	.45	
	5	1(.42)	2(2.57)	3	.93	S
		54	325	379	6.28	

Intuition

Q. 54 (Correct)	R	A	B	T	X^2	
	1	4(4.02)	24(23.98)	28	0.00	C
	2	5(4.16)	24(24.83)	29	.20	
	3	16(8.33)	42(49.67)	58	8.25	
	4	22(19.67)	115(117.33)	137	.32	
	5	8(18.81)	123(112.18)	131	7.26	
		55	328	383	16.03	D

Innovativeness

Q. 26 (Time Inf)	R	A	B	T	X^2	
	1	33(23.36)	54(63.64)	87	5.44	
	2	44(52.62)	152(143.38)	196	1.93	
	3	34(40.27)	116(109.73)	150	1.33	
	4	7(2.42)	2(6.58)	9	11.85	
	5	2(1.34)	3(3.66)	5	1.12	
		120	327	447	21.67	D

Q. 27 (Fre Inf)	R	A	B	T	X^2	
	1	35(27.23)	76(83.77)	111	2.94	
	2	24(30.91)	102(95.09)	126	2.05	
	3	17(18.89)	60(58.11)	77	.25	
	4	13(11.77)	35(36.23)	48	.17	
	5	15(15.21)	47(46.78)	62	0.00	
		104	320	424	5.41	S

Q. 28 (Idea)	R	A	B	T	X^2	
	1	4(1.83)	3(5.17)	7	3.48	
	2	14(9.15)	21(25.85)	35	3.48	
	3	33(26.40)	68(74.60)	101	2.23	
	4	23(21.69)	60(61.31)	83	.11	
	5	41(55.93)	173(158.07)	214	1.41	
		115	325	440	10.71	D

R	A	B	T	x^2	
					C
Q. 29					
(Source					
Inf)					
1	12(6.44)	12(17.56)	24	6.56	
2	1(.54)	1(1.46)	2	.54	
3	28(43.98)	136(120.02)	164	7.93	
4	43(49.08)	140(133.92)	183	1.03	
5	34(17.97)	33(49.03)	67	19.54	
	118	322	440	35.60	D
Q. 30					
(New					
Idea)					
1	21(20.88)	55(55.12)	76	0.00	
2	3(6.59)	21(17.41)	24	2.70	
3	44(44.79)	119(118.21)	163	.02	
4	53(48.91)	125(129.09)	178	.47	
5	1(.82)	2(2.18)	3	.05	
	122	322	444	3.24	S

SURVEY RESULTS

```
EMPLOYER

   CODE
     1. I******************************** (  322)
        I MILITARY
        I
     2. I** (    9)
        I CIVILIAN
        I....I....I....I....I....I....I
        0   100  200  300  400  500
        FREQUENCY


MEAN         1.027      MEDIAN      1.014      STD ERR     0.009
MODE         1.000      VARIANCE    0.027      STD DEV     0.163
KURTOSIS    32.310      RANGE       1.000      SKEWNESS    5.841
MINIMUM      1.000                             MAXIMUM     2.000


VALID CASES    331      MISSING CASES     0
```

POSITION

CODE

1. *********************** (119)
   I COMMANDER
2. *********** (56)
   I DEPUTY COMM
3. ******************* (98)
   I STAFF
4. ********** (48)
   I DIRECTOR
5. ** (5)
   I PROJECT MANAG
(MISSING) ** (5)
   I....I....I....I....I....I....I....I....I....I....I
   0   40   80   120 160 200
   FREQUENCY

MEAN	2.276	STD ERR	0.064	MEDIAN	2.286
MODE	1.000	STD DEV	1.149	VARIANCE	1.320
KURTOSIS	-1.155	SKEWNESS	0.277	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   326   MISSING CASES   5

215

LOCATION

CCCE

1. ** (3)
   NEW ENGLAND

2. *********************** (136)
   EAST

3. ********* (42)
   SCUTHEAST

4. ****** (22)
   N CENTRAL

5. **** (13)
   S CENTRAL

216

```
 6.  I
     *** ( 9)
     I  NCRTHWEST
     I
 7.  I
     ******* ( 26)
     I  SCUTHWEST
     I
 5.  I
     *** ( 7)
     I  HAWAII
     I
10.  I
     ************ ( 71)
     I  OVERSEAS
     I
-1.  I
(MISSING) ** ( 2)
     I
     I....I....I....I....I....I....I....I....I....I
     0   40   80   120   160   200
     FREQUENCY

MEAN       4.751      STD ERR    0.179      MEDIAN     3.107
MODE       2.000      STD DEV    3.239      VARIANCE   10.493
KURTOSIS  -1.176      SKEWNESS   0.713      RANGE      9.000
MINIMUM    1.000      MAXIMUM    10.000

VALID CASES    329     MISSING CASES    2
```

AGE

```
CODE
43.  ***** (    5)
44.  ********* (   11)
45.  ********** (   18)
46.  ********** (   26)
47.  ********** (   28)
48.  ********** (   33)
49.  ********** (   37)
50.  ********** (   32)
51.  ********** (   28)
52.  ********** (   30)
53.  ********** (   32)
```

```
54. ******************** (  18)
55. ************ (  11)
56. ************ (  11)
57. ***** (   4)
58. ****** (   5)
63. ** (   1)
66. ** (   1)
   C.........I.........I.........I.........I.........I
   FREQUENCY 10        20        30        40        50
```

MEAN	49.976	STD ERR	0.198	MEDIAN	49.734
MODE	49.000	STD DEV	3.595	VARIANCE	12.921
KURTOSIS	0.683	SKEWNESS	0.493	RANGE	23.000
MINIMUM	43.000	MAXIMUM	66.000		

VALID CASES   331   MISSING CASES   0

SEX

CCDE

```
1. *   ( FEMALE      8)
    I
    I
2. I************************  (    MALE          323)
    I
    I....I....I....I....I....I
        100  200  300  400  500
    FREQUENCY
```

MEAN	1.976	MEDIAN	1.98E
MODE	2.000	STD ERR	0.008	VARIANCE	0.024
KURTOSIS	36.974	STD DEV	0.154	RANGE	1.000
MINIMUM	1.000	SKEWNESS	-6.225
	MAXIMUM	2.000

VALID CASES   331   MISSING CASES   0

HEIGHT

```
      CODE
       1.  ****  (   11)
           I  5.4 TO 5.6
       
       2.  ***********  (   71)
           I  5.7 TO 5.9
       
       3.  ****************************  (   177)
           I  5.10 TO 6.0
       
       4.  **********  (   55)
           I  6.1 TO 6.3
       
       5.  *****  (   16)
           I  6.4 TO 6.6
       
  (MISSING)  *  (   1)
           I....I....I....I....I....I
           0   40   80  120  160  200
              FREQUENCY
```

MEAN	2.982	STD ERR	0.046	MEDIAN	2.965
MODE	3.000	STD DEV	0.843	VARIANCE	0.711
KURTOSIS	0.404	SKEWNESS	0.188	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   330   MISSING CASES   1

WEIGHT

CODE

1. ****(11)
    125-145

2. ****************(95)
    146-165

3. *****************(142)
    166-185

4. ***********(66)
    186-205

5. ****(17)
    206-235
    I.......I.......I.......I.......I.......I
    0   40   80   120   160   200
    FREQUENCY

MEAN   2.945   STD ERR   0.050   MEDIAN   2.915
MODE   3.000   STD DEV   0.908   VARIANCE   0.825
KURTOSIS   -0.227   SKEWNESS   0.248   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES 331   MISSING CASES   0

RACE

```
CODE
  2.  I** ( BLACK  18)
      I
  3.  I* ( ORIENTAL  1)
      I
  4.  I* ( SPANISH AM  3)
      I
  5.  I****************** ( WHITE  308)
      I
  6.  I* ( OTHER  1)
      I....I....I....I....I....I....I....I....I....I....I
      0   100  200  300  400  500
          FREQUENCY
```

MEAN	4.825	STD ERR	0.038	MEDIAN	4.966
MODE	5.000	STD DEV	0.696	VARIANCE	0.484
KURTOSIS	12.241	SKEWNESS	-3.710	RANGE	4.000
MINIMUM	2.000	MAXIMUM	6.000		

VALID CASES   331   MISSING CASES   0

223

```
ORGTIME

CCCE  ]
      ]
  1.  ]************************ (  122)
      ]
  2.  ]************** (  78)
      ]
  3.  ]***** ( 18)
      ]
  4.  ]***** ( 14)
      ]
  5.  ]** ( 2)
      ]
  6.  ]** ( 4)
      ]
  7.  ]** ( 3)
      ]
```

224

```
11. * ( 1)

24. * ( 1)

27. * ( 1)

(MISSING) ********************** ( 87)
          I.......I.......I.......I.......I.......I.......I
          0      40      80     120     160     200
          FREQUENCY
```

MEAN	2.070	STD ERR	0.161
MODE	1.000	STD DEV	2.519
KURTOSIS	62.678	SKEWNESS	7.106
MINIMUM	1.000	MAXIMUM	27.000

MEDIAN	1.500
VARIANCE	6.345
RANGE	26.000

VALID CASES   244   MISSING CASES   87

225

EDUC

```
CODE
2. ** (    6)
   BA
3. **** (   25)
   BS
4. ***** (   42)
   MBA
5. ** (   13)
   MPA
6. ************** (  207)
   MASTERS
7. **** (   38)
   DOCTORATE
   I.....I.....I.....I.....I.....I
   100   200   300   400   500
   FREQUENCY
```

MEAN	5.523	STD ERR	0.065	MEDIAN	5.884
MODE	6.000	STD DEV	1.187	VARIANCE	1.408
KURTOSIS	0.639	SKEWNESS	-1.220	RANGE	5.000
MINIMUM	2.000	MAXIMUM	7.000		

VALID CASES   331   MISSING CASES   0

STUCY

```
CODE
  1. ********** (  47)
     I ENG SCI
     I
  2. ******* (  32)
     I HARD SCI
     I
  3. ************************ ( 124)
     I SOFT SCI
     I
  4. ****************** (  97)
     I BUSINESS
     I
  5. ***** (  19)
     I OVERLAP
     I
  6. *** (   7)
     I MISC
     I
(MISSING) ** (   5)
     I....I....I....I....I....I....I
     0   40   80  120  160  200
     FREQUENCY
```

MEAN   3.052   STD ERR   0.065   MEDIAN   3.177
MODE   3.000   STD DEV   1.181   VARIANCE   1.395
KURTOSIS   -0.185   SKEWNESS   -0.179   RANGE   5.000
MINIMUM   1.000   MAXIMUM   6.000

VALID CASES   326   MISSING CASES   5

MARRIED

CODE

```
CODE
 1. I**    ( DIVORCED    5)
    I
 2. I***   ( CIV-MARR   16)
    I
 3. I***********************************  (           306)
    I MARRIED
 4. I**   ( SINGLE    3)
    I
 5. I*   ( WIDOWED    1)
    I
    I....I....I....I....I....I....I....I....I....I....I
    0   100  200  300  400  500
    FREQUENCY
```

MEAN	2.937	STD ERR	0.020	MEDIAN	2.972	
MODE	3.000	STD DEV	0.355	VARIANCE	0.126	
KURTOSIS	17.219	SKEWNESS	-2.513	RANGE	4.000	
MINIMUM	1.000	MAXIMUM	5.000			

VALID CASES   331   MISSING CASES   0

228

TIMES

```
CODE
  0.  *         (    3)
      I        I
      I========I
  1.  *****************************  (  305)
      I        I
      I========I
  2.  ***      (   21)
      I        I
      I========I
  4.  *        (    1)
      I        I
      I========I
  5.  *        (    1)
(MISSING) * (  1)
      I....I....I....I....I....I....I....I....I....I....I
      0      100      200      300      400      500
      FREQUENCY
```

MEAN	1.064	STD ERR	0.017
MODE	1.000	STD DEV	0.310
KURTOSIS	28.497	SKEWNESS	3.981
MINIMUM	0.0	MAXIMUM	4.000

MEDIAN	1.031		
VARIANCE	0.096		
RANGE	4.000		

VALID CASES   330   MISSING CASES   1

SPCUSEC

CCDE

1. *** (8)
   NC SPCUSE

2. ** (4)
   LT 12 YEARS

3. ********* (56)
   12 YRS

4. ****** (34)
   13

5. ********* (57)
   14 YRS

6. ****** (22)
   15 YRS

7. ****************** (102)
   16 YRS

```
  8.  I
      *****(    20)
      I 17 YRS
      I
  9.  I
      ****(    11)
      I 18 YRS
      I
 10.  I
      ****(    15)
      I GT 18 YRS
      I
  -1. I
      **(     2)
(MISSING) I
      I....I....I....I....I....I....I....I....I....I....I
      0        40       80       120      160      200
      FREQUENCY
```

MEAN	5.653	STD ERR	0.116	MEDIAN	5.750	
MODE	7.000	STD DEV	2.097	VARIANCE	4.398	
KURTOSIS	-0.551	SKEWNESS	-0.022	RANGE	9.000	
MINIMUM	1.000	MAXIMUM	10.000			

VALID CASES   329   MISSING CASES   2

RELOCATE

CODE

1. * (1)
    0-5
2. *** (10)
    5-10
3. ********* (39)
    10-15
4. ************************ (112)
    15-20
5. ************************************ (166)
    20+
-1. ** (3)
(MISSING)

I....·....I....·....I....·....I....·....I....·....I
0   40   80   120   160   200
FREQUENCY

```
MEAN       4.317      STD ERR    0.045      MEDIAN     4.512
MODE       5.000      STD DEV    0.822      VARIANCE   0.676
KURTOSIS   0.817      SKEWNESS  -1.111      RANGE      4.000
MINIMUM    1.000      MAXIMUM    5.000

VALID CASES   328     MISSING CASES   3
```

YRSMIL

```
  CODE
   1.  ***** ( 17)
       I 17-22
       I
   2.  ********************************************** ( 174)
       I 23-28
       I
   3.  *************************** ( 99)
       I 29-34
       I
   4.  ******** ( 27)
       I 35-40
       I
   5.  ** ( 2)
       I 41-46
       I
 (MISSING)  ** ( 2)
   -1.  I
       I....I....I....I....I....I....I....I....I....I....I
       0   40   80   120  160  200
       FREQUENCY
```

MEAN   2.492   STD ERR   0.043   MEDIAN   2.348
MODE   2.000   STD DEV   0.785   VARIANCE   0.617
KURTOSIS   0.006   SKEWNESS   0.595   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES   329   MISSING CASES   2

RELIGICA

```
CCDE

1.  ** ( NCNE    9)
    I
2.  ******* ( CATHOLIC    83)
    I
3.  * ( JEWISH    4)
    I
4.  ** ( CTHER    6)
    I
5.  *********************** ( PRCTESTANT    227)
    I
(MISSING)  * ( 2)
    I....I....I....I....I....I....I....I....I....I....I
    C    100    200    300    400    500
    FREGUENCY
```

MEAN	4.051	STD ERR	0.077	MEDIAN	4.775
MODE	5.000	STD DEV	1.398	VARIANCE	1.955
KLRTOSIS	-0.940	SKEWNESS	-0.965	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   329   MISSING CASES   2

CHGREL

CODE

1. ****** (51)
    YES

2. ********************** (278)
    NO

(MISSING) * (2)

I........I........I........I........I........I
FRECUENCY 100   200   300   400   500

MEAN   1.845   STD ERR   0.020   MEDIAN   1.908
MODE   2.000   STD DEV   0.362   VARIANCE   0.131
KURTOSIS   1.678   SKEWNESS -1.915   RANGE   1.000
MINIMUM   1.000   MAXIMUM   2.000

VALID CASES   329   MISSING CASES   2

235

CHGT IMES

CODE

```
0. ****************************** (    278)
1. ******  (    50)
2. *  (   1)

(MISSING)  9. *  (   2)

    I........I........I........I........I........I
    0       100      200      300      400      500
         FREQUENCY
```

MEAN	0.158	STD ERR	0.021	MEDIAN	0.092
MODE	0.0	STD DEV	0.374	VARIANCE	0.140
KURTOSIS	6.839	SKEWNESS	2.058	RANGE	2.000
MINIMUM	0.0	MAXIMUM	2.000		

VALID CASES   329   MISSING CASES   2

CCCFAT⊦

CODE

1. ************** (57)
   I BLUE CCLL
2. *************** (61)
   I HI PROF
3. **************** (65)
   I LC PRCF
4. ****************** (73)
   I WHITE COLL
5. ****** (24)
   I AGRIC
6. ********** (42)
   I CTHER
(MISSING) ****** (9)
   I....I....I....I....I....I
   0   20   40   60   80   100
   FREQLENCY

MEAN	3.224	STD ERR	0.089	MEDIAN	3.162
MODE	4.000	STD DEV	1.598	VARIANCE	2.554
KURTOSIS	-C.940	SKEWNESS	0.252	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID CASES   322   MISSING CASES   9

237

ORGMEMB

```
CODE

1.  ** (    2)
    NCNE

2.  ********** (   62)
    1-2

3.  ***************** (  158)
    3-4

4.  ********** (   71)
    5-6

5.  ******** (   34)
    6+

(MISSING)  ** (    4)
    I.....I.....I.....I.....I.....I
    0    40    80   120   160   200
         FREQUENCY
```

MEAN   3.223   STD ERR   0.049   MEDIAN   3.130
MODE   3.000   STD DEV   0.894   VARIANCE   0.800
KURTOSIS   -0.327   SKEWNESS   0.374   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES   327   MISSING CASES   4

FRIENCS

```
CCDE
2.  I
    ***I    ( 20)
    I 1-2
3.  I
    *****I ( 36)
    I  3-5
4.  I
    **************I        ( 229)
    I  6+
5.  I
    *****I( 41)
    I DCNT KNOW
(MISSING) **I ( 5)
    I
    I....I....I....I....I....I
    FRECLENCY 100  200  300  400  500
```

MEAN   3.893   STD ERR   0.038   MEDIAN   3.967
MODE   4.000   STD DEV   0.687   VARIANCE   0.472
KURTOSIS   1.782   SKEWNESS   -1.006   RANGE   3.000
MINIMUM   2.000   MAXIMUM   5.000

VALID CASES   326   MISSING CASES   5

CONTACT

```
CODE
  1. I**         ( 0-4     2)
     I    0-4
  2. I*********  (        47)
     I    5-8
  3. I************* (      65)
     I    9-12
  4. I*********  (        44)
     I    12-16
  5. I*************** (   172)
     I    16+
(MISSING) I* (  1)
     I...:....I....:....I....:....I....:....I....:....I
     0        40       80       120      160      200
     FREQUENCY
```

MEAN	4.021	STD ERR	0.064	MEDIAN	4.541
MODE	5.000	STD DEV	1.160	VARIANCE	1.346
KURTOSIS	-1.012	SKEWNESS	-0.688	RANGE	4.000
MINIMUM	-1.000	MAXIMUM	5.000		

VALID CASES   320   MISSING CASES   1

DECIDE

```
CODE
  1.  I************************************* ( 126)
      I DECIDE-INFORM
  2.  I************************** ( 113)
      I DECIDE-ROUT
  3.  I********** ( 61)
      I PRESENT PROBL
  4.  I** ( 2)
      I NOT MY JOB
  5.  I****** ( 25)
      I WAIT-CHECK
(MISSING) I** ( 4)
      I....I....I....I....I....I....I....I....I....I....I
      0   40      80      120     160     200
      FREQUENCY
```

MEAN	2.043	STD ERR	0.063	MEDIAN	1.832
MODE	1.000	STD DEV	1.134	VARIANCE	1.287
KURTOSIS	1.015	SKEWNESS	1.210	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

TIMEINF

```
CODE

  1. I
     I********** (  54)
     I MUCH BEFORE
     I
  2. I**************************** ( 152)
     I BEFORE
     I
  3. I********************* ( 116)
     I SAME TIME
     I
  4. I** ( 2)
     I LATER
     I
  5. I** ( 3)
     I MUCH LATER
     I
(MISSING) I** ( 4)
     I
     I....I....I....I....I....I....I....I....I....I....I
     0       40       80      120      160      200
     FREQUENCY
```

MEAN	2.229	STD ERR	0.042	MEDIAN	2.220
MODE	2.000	STD DEV	0.759	VARIANCE	0.576
KURTOSIS	0.372	SKEWNESS	0.182	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

FREQINF

```
CODE
 1. I************** (   76)
    I 1-3
 2. I****************** (  102)
    I 4-7
 3. I*********** (   60)
    I 8-11
 4. I******* (   35)
    I 12-16
 5. I************ (   47)
    I 17+
(MISSING) I*** (   11)
    I....I....I....I....I....I....I
    0   40   80  120  160  200
    FREQUENCY
```

MEAN	2.609	STD ERR	0.075	MEDIAN	2.324
MODE	2.000	STD DEV	1.349	VARIANCE	1.819
KURTOSIS	-0.912	SKEWNESS	0.514	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   320   MISSING CASES   11

IDEA

CODE
```
1.  I
    I**    (    3)
    0
2.  I
    I******    (   21)
    1-2
3.  I
    I**************    (   68)
    3-4
4.  I
    I*************    (   60)
    5-6
5.  I
    I*******************************    (  173)
    7+
(MISSING)  I
    I***    (    6)
    I....I....I....I....I....I....I
FREQUENCY  40   80  120  160  200
```

MEAN	4.166	STD ERR	0.057	MEDIAN	4.561
MODE	5.000	STD DEV	1.029	VARIANCE	1.059
KURTOSIS	-0.298	SKEWNESS	-0.902	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   325   MISSING CASES   6

244

SOURCINF

CODE

```
1.  **** I          ( LITERAT  12)
       I
2.  *   I          ( VENDCR  1)
       I
3.  ****************** I       ( EXPER   136)
       I
4.  ****************** I       ( STAFF   140)
       I
5.  ******** I   ( EXT SCURC  32)
       I
(MISSING) *** I ( 9)
    I....I....I....I....I....I....I....I....I
    0    40   80   120  160  200
         FREQUENCY
```

MEAN	3.562	STD ERR	0.046	MEDIAN 3.586
MODE	4.000	STD DEV	0.826	VARIANCE 0.683
KURTOSIS	1.617	SKEWNESS	-0.666	RANGE 4.000
MINIMUM	1.000	MAXIMUM	5.000	

VALID CASES 322   MISSING CASES 9

NEWIDEA

CODE

1. ******************* (55)
   ANALYZE
2. ****** (21)
   RESERVE
3. ******************************* (119)
   DELEGATE
4. ******************************* (125)
   DISCUSS
5. ** (2)
   COST ANALYZE

(MISSING) *** (9)

```
I.........I.........I.........I.........I.........I.........I
0        40        80       120       160       200
FREQUENCY
```

MEAN	2.994	STD ERR	0.060	MEDIAN	3.214
MODE	4.000	STD DEV	1.079	VARIANCE	1.165
KURTOSIS	-0.573	SKEWNESS	-0.780	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   322   MISSING CASES   9

246

COMMUNIC

CODE

2. ****(37)
   TIMING
3. **** (40)
   LANGUAGE
4. ** (12)
   RESTRICT
5. ****************** (216)
   UNAMBIGUOUS
5. *** (26)
(MISSING)

I....I....I....I....I....I
FREQUENCY 100   200   300   400   500

MEAN	4.334	STD ERR	0.063	MEDIAN 4.794
MODE	5.000	STD DEV	1.103	VARIANCE 1.217
KURTOSIS	-0.156	SKEWNESS	-1.240	RANGE 3.000
MINIMUM	2.000	MAXIMUM	5.000	

VALID CASES   305   MISSING CASES   26

JOURNAL

```
CODE
  1. *** ( 8)
     I  1-2
     I
  2. ****************** ( 58)
     I  3-4
     I
  3. ******************************* ( 118)
     I  5-6
     I
  4. ************** ( 52)
     I  7-8
     I
  5. ************************* ( 91)
     I  9+
     I
(MISSING) ** ( 4)
     I....I....I....I....I....I....I....I....I....I....I
     0    40   80   120  160  200
FREQUENCY
```

MEAN	3.489	STD ERR	0.063	MEDIAN	3.326
MODE	2.000	STD DEV	1.145	VARIANCE	1.312
KURTOSIS	-1.073	SKEWNESS	-0.017	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

LESSAL

CODE

```
1.  ********************** (   151)
    I YES
2.  ************************ (   174)
    I NC

 5. ** (    6)
(MISSING)
    I....I....I....I....I....I....I
FREQUENCY  40      80      120     160     200
```

MEAN	1.535	STD ERR	0.028	MEDIAN	1.566
MODE	2.000	STD DEV	0.500	VARIANCE	0.250
KURTOSIS	-1.992	SKEWNESS	-0.143	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID CASES   325   MISSING CASES   6

249

AMCUNT

```
CCCE
 0. ******************************************* (  176)
    I
 1. *********** (  39)
    $2000
 2. ****************** (  67)
    $5000
 3. ********* (  31)
    $10000
 4. * (  1)
    $150CC
 5. ** (  3)
    $200CC
(MISSING) ***** (  14)
    I....:....I....:....I....:....I....:....I....:....I
    C        40       80      120      160      200
    FRECLENCY
```

MEAN	0.899	STD ERR	0.065	MEDIAN	0.401
MODE	0.0	STD DEV	1.154	VARIANCE	1.332
KURTOSIS	C.170	SKEWNESS	1.007	RANGE	5.000
MINIMUM	0.0	MAXIMUM	5.000		

VALID CASES   317   MISSING CASES   14

WORTH

CODE

0. ***************************** (142)

1. ** (2) MONEY IMPORTANT

2. ********** (60) WORTH PAY

3. ****** (25) UNIQUE

4. ********* (50) MONEY-FAMILY

5. ******** (36) MONEY NEEDED

6. * (1)

(MISSING) **** (15)

```
I.......I.......I.......I.......I.......I
0       40      80     120     160     200
FREQUENCY
```

MEAN	1.845	STD ERR	0.106	MEDIAN	1.733
MODE	0.0	STD DEV	1.892	VARIANCE	3.579
KURTOSIS	-1.353	SKEWNESS	0.400	RANGE	6.000
MINIMUM	0.0	MAXIMUM	6.000		

VALID CASES   316   MISSING CASES   15

251

TIMELIM

CODE

```
          I
       1. I********** ( 47)
          I NOT PRESSED
          I
       2. I******************** ( 107)
          I WANT MORE
          I
       3. I********** ( 62)
          I NEED TO PUSH
          I
       4. I******** ( 40)
          I NOT ENOUGH
          I
       5. I******** ( 71)
          I NEVER ENOUGH
          I
(MISSING) 9.** ( 4)
          I
          I....I....I....I....I....I....I....I....I....I....I
          0   40   80   120  160  200
           FREQUENCY
```

MEAN	2.942	STD ERR	0.076	MEDIAN	2.652
MODE	2.000	STD DEV	1.377	VARIANCE	1.895
KURTOSIS	-1.222	SKEWNESS	0.275	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

FLEXTIME

CODE

```
1.  *******  (  62)
    I NC HOURS
2.  ***************  ( 221)
    I PROFESSIONAL
3.  **  (  7)
    I CLTSIDE
4.  ***  (  31)
    I GIVE UPON NEED
5.  * (  4)
    I NC MISMANAGEMENT
(MISSING) * (  6)
    I....I....I....I....I....I....I
    0   100   200   300   400   500
    FREQUENCY
```

MEAN	2.058	STD ERR	0.047	MEDIAN	1.955
MODE	2.000	STD DEV	0.839	VARIANCE	0.703
KURTOSIS	2.204	SKEWNESS	1.374	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   325   MISSING CASES   6

SITUATEC

```
CODE

1.  ******************** (    126)
    I TIME FOR UNEXPEC
    I
2.  *************************** (    167)
    I HEAVY SCHEDULE
    I
3.  ** (  2)
    I SLBORD
    I
4.  ******** (    31)
    I ORGANIZED
    I
5.  * (  1)
    I IMPRESS BOSS
    I
(MISSING) ** (  4)
    I....I....I....I....I....I....I....I....I....I....I
    0   40   80   120   160   200
    FREQUENCY
```

MEAN	1.820	STD ERR	0.048	MEDIAN	1.725
MODE	2.000	STD DEV	0.876	VARIANCE	0.768
KURTOSIS	1.549	SKEWNESS	1.323	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

POLICY

```
CODE
  1.  I ** ( 11)
     I WCRK AROUNC
     I
  2.  I ****** ( 64)
     I GATHER
     I
  3.  I *************** ( 235)
     I CCNVINCE OPP
     I
  4.  I *** ( 15)
     I IGNORE OPP
     I
(MISSING)  I ** ( 6)
     I....I....I....I....I....I....I....I....I....I....I
     0        100       200       300       400       500
     FREQUENCY
```

```
MEAN         2.762        STD ERR      0.032        MEDIAN       2.872
MODE         3.000        STD DEV      0.576        VARIANCE     0.332
KURTOSIS     1.775        SKEWNESS    -1.027         RANGE        3.000
MINIMUM      1.000        MAXIMUM      4.000

VALID CASES  325          MISSING CASES    6
```

ACCEPT

```
        CCDE
        I
    1.  I*** ( 28)
        I  ACCEPT EQUAL
        I
    2.  I** ( 18)
        I  ACCEPT-CONTINUE
        I
    3.  I********** (      222)
        I  ANALYZE CAUSE
        I
    4.  I* ( 4)
        I  AIM TO SUCCEED
        I
    5.  I***** ( 56)
        I  SUCCESSFUL
        I
(MISSING) I* ( 2)
        I
        I....I....I....I....I....I....I....I....I....I....I
        0   100  200  300  400  500
        FREQUENCY
```

MEAN	3.128	STD ERR	0.057	MEDIAN	3.032
MODE	3.000	STD DEV	1.038	VARIANCE	1.078
KURTOSIS	0.437	SKEWNESS	0.203	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   328   MISSING CASES   3

MAVERICK

```
        CODE
          I
      1.  I**** (  12)
          I  CHANGE MAVERICK
          I
          I
      2.  I** (  2)
          I  ADJUST ORGANIZ
          I
      3.  I****************** (  102)
          I  ALLOW STYLE
          I
          I
      4.  I******************************** (  198)
          I  SUGGEST CHANGE
          I
      5.  I**** (  14)
          I  DON'T SELECT
          I
(MISSING) I** (  3)
          I
          I....I....I....I....I....I....I....I....I....I....I
          0    40   80   120  160  200
          FREQUENCY
```

MEAN	3.610	STD ERR	0.041	MEDIAN	3.742
MODE	4.000	STD DEV	0.746	VARIANCE	0.557
KURTOSIS	3.415	SKEWNESS	-1.447	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   328   MISSING CASES   3

257

FRCMGTEC

CODE

1. ******* (23)
   CAUTION

2. ********* (38)
   WAIT

3. ****************** (96)
   FAST

4. ********************** (133)
   NO TROUBLE

5. ********** (27)
   GRADUAL

(MISSING) ** (4)

```
       I........I........I........I........I........I........I
       0       40       80      120      160      200
    FREQUENCY
```

MEAN   3.376   STD ERR   0.058   MEDIAN   3.549
MODE   4.000   STD DEV   1.058   VARIANCE 1.119
KURTOSIS -0.160   SKEWNESS -0.579   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES   327   MISSING CASES   4

RELATION

CODE

```
      I
1.    I**********************  (  104)
      I FAMILY
      I
2.    I**********  ( 52)
      I CHOICE NOT FORCED
      I
3.    I*********************  (  105)
      I FAMILY 2ND
      I
4.    I**  (  6)
      I COMPROMISE
      I
5.    I************  (  60)
      I LENGTHY HOURS
      I
(MISSING)I**  (  4)
      I
      I....I....I....I....I....I....I....I....I....I....I
      0    40   80   120  160  200
      FREQUENCY
```

MEAN	2.590	STD ERR	0.079	MEDIAN	2.571
MODE	3.000	STD DEV	1.422	VARIANCE	2.022
KURTOSIS	-0.948	SKEWNESS	0.467	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES 327   MISSING CASES 4

259

UNCESPCS

CODE

1. ** (9)
   MINIMUM

3. ******** (75)
   REWARDING

4. ****************** (224)
   SATISFIED

5. ** (19)
   MEANS-END

9. * (4)
   (MISSING)

```
I......I......I......I......I......I
0     100    200    300    400    500
        FREQUENCY
```

MEAN	3.746	STD ERR	0.038	MEDIAN	3.855
MODE	4.000	STD DEV	0.687	VARIANCE	0.472
KURTOSIS	5.142	SKEWNESS	-1.678	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

ASSIGN

CODE

1. ▪***********************▪ (86)
   TEMPORARY

2. *** (9)
   PERFECT

3. ▪***************************************▪ (193)
   LAIGUE

4. *** (13)
   DEMANDS

5. *** (6)
   ONLY CHOICE

(MISSING) ****** (24)

```
I.........I.........I.........I.........I.........I
0        40        80       120       160       200
FREQUENCY
```

MEAN	2.492	STD ERR	0.058	MEDIAN	2.803
MODE	3.000	STD DEV	1.008	VARIANCE	1.015
KURTOSIS	-0.625	SKEWNESS	-0.392	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   307   MISSING CASES   24

261

LEAVE

```
CODE

 1.  *** (   11)
     I  LONG
     I
 2.  ************************************* (  180)
     I  FIT
     I
 3.  *************** (   83)
     I  FAMILY
 4.  ********* (   46)
     I  NOT LONG
     I
(MISSING) 5. *** (   11)
     I..........I..........I..........I..........I..........I
   FREQUENCY  40        80        120       160       200
```

MEAN	2.512	STD ERR	0.044	MEDIAN	2.328
MODE	2.000	STD DEV	0.780	VARIANCE	0.608
KURTOSIS	-0.437	SKEWNESS	0.657	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID CASES   320   MISSING CASES   11

HEALTH

```
    CODE

    1. I
       I * ( POOR 1)
       I
    2. I ******************* ( 92)
       I GOOD FOR AGE
       I
    3. I ************************************* ( 153)
       I BETTER THAN MOST
       I
    4. I **** ( 13)
       I FAIR
       I
    5. I ******************** ( 68)
       I PERFECT
       I
(MISSING) I ** ( 4)
       I
       I....I....I....I....I....I....I....I....I....I....I
FREQUENCY   40      80     120     160     200
```

MEAN	3.168	STD ERR	0.059	MEDIAN	2.961
MODE	3.000	STD DEV	1.068	VARIANCE	1.140
KURTOSIS	-0.708	SKEWNESS	0.679	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   327   MISSING CASES   4

263

FIRE

CODE

2. * I (DELEGATE 2)

3. * I (DELAY 2)

5. ****************** (326)
   DIRECT DISCUSS

(MISSING) * I (1)

I....I....I....I....I....I
FREQUENCY 100   200   300   400   500

MEAN   4.970   STD ERR   0.015   MEDIAN   4.994
MODE   5.000   STD DEV   0.279   VARIANCE   0.078
KURTOSIS 91.176   SKEWNESS   -9.478   RANGE   3.000
MINIMUM   2.000   MAXIMUM   5.000

VALID CASES   330   MISSING CASES   1

CONFLICT

CODE

1. ********* (41)
   MARRIED TO JOB

2. ******* (27)
   PAST MODE

3. ************************* (161)
   VIOLATE ETHICS

4. *** (8)
   SUBORD EFFECT

5. ************** (81)
   DIFFER OPINION

9. *** (13)
(MISSING)

```
     I....I....I....I....I....I
     0    40   80   120  160  200
   FREQUENCY
```

MEAN	3.192	STD ERR	0.071	MEDIAN	3.065
MODE	3.000	STD DEV	1.270	VARIANCE	1.613
KURTOSIS	-0.717	SKEWNESS	0.007	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   318   MISSING CASES   13

OPPOSE

```
CODE

1.  ******** (    28)
    0-10
2.  ********** (    41)
    2-8
3.  ************** (    60)
    3-7
4.  ********* (    36)
    4-6
5.  ******** (    26)
    5-5
6.  ********************** (   117)
    ACT YIELD

(MISSING)  ******* (    23)

        I....I....I....I....I....I....I....I....I....I
        0   40   80   120  160  200
        FRECUENCY
```

MEAN	4.110	STD ERR	0.101	MEDIAN	4.194
MODE	6.000	STD DEV	1.774	VARIANCE	3.147
KURTOSIS	-1.342	SKEWNESS	-0.295	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID CASES   308   MISSING CASES   23

ADVISE

```
CODE
1. ****** (  25)
   2-10-200%

2. ************* (  75)
   4-10-100%

3. ************************* ( 154)
   6-10-50%

4. ********** (  50)
   8-10-25%

5. **** (11)
   GUARANTEED 0%

6. * (  1)

(MISSING) ***** (  15)
   I.....I.....I.....I.....I.....I
   0     40    80   120   160   200
   FREQUENCY
```

MEAN   2.842   STD ERR   0.052   MEDIAN   2.877
MODE   3.000   STD DEV   0.926   VARIANCE   0.857
KURTCSIS   0.288   SKEWNESS   0.078   RANGE   5.000
MINIMUM   1.000   MAXIMUM   6.000

VALID CASES   316   MISSING CASES   15

PRECURE

CODE

1. ********** (69)
   I RESEARCH

2. ************************** (150)
   I DELAY

3. **** (21)
   I STOP

4. *********** (65)
   I INVEST

5. *** (15)
   I TRANSFER

9. *** (11)
(MISSING)
   I....:....I....:....I....:....I....:....I....:....I
   0   40   80   120   160   200
   FREQUENCY

MEAN	2.397	STD ERR	0.065	MEDIAN	2.107
MODE	2.000	STD DEV	1.167	VARIANCE	1.362
KURTOSIS	-0.641	SKEWNESS	0.674	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   320   MISSING CASES   11

268

PRESSURE

```
CODE
  1. ******************************* (  132)
     DELEGATE
  2. ** (  4)
     ACD
  3. *** (  6)
     DELAY
  4. ********************************** (  148)
     PRIORITIZE
  5. ********* (  40)
     CFEN
(MISSING) * (  1)
     I........I........I........I........I........I
     0       40       80      120      160      200
     FREQUENCY
```

MEAN	2.879	STD ERR	0.088	MEDIAN	3.655
MODE	4.000	STD DEV	1.593	VARIANCE	2.538
KURTOSIS	-1.735	SKEWNESS	-0.218	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID CASES   330   MISSING CASES   1

CORRECT

CODE

```
1.  I******   (    24)
    I 50%
    I
2.  I******   (    24)
    I 50-60%
    I
3.  I*********   (    42)
    I 6C-70%
    I
4.  I*******************   (    115)
    I 70-80%
    I
5.  I********************   (    123)
    I 80%+
    I
(MISSING)  I** (    3)
    I
    I....:....I....:....I....:....I....:....I....:....I
  C         40        80       120       160       200
  FREQUENCY
```

MEAN   3.881   STD ERR   0.066   MEDIAN   4.143
MODE   5.000   STD DEV   1.202   VARIANCE   1.445
KURTCSIS   0.215   SKEWNESS -1.046   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES   328   MISSING CASES   3

MATERIAL

CODE

```
1.  ******************** (  101)
    UTILIZE
2.  ************************** (  194)
    TEST
3.  **** (  16)
    CONSTRUCT
4.  *** (  12)
    CONSULT
5.  ** (  2)
    WAIT
(MISSING) *** (  6)
    I.........I.........I.........I.........I.........I
C   40        80        120       160       200
FREQUENCY
```

MEAN   1.831   STD ERR   0.041   MEDIAN   1.817
MODE   2.000   STD DEV   0.732   VARIANCE   0.536
KURTOSIS   2.942   SKEWNESS   1.224   RANGE   4.000
MINIMUM   1.000   MAXIMUM   5.000

VALID CASES   325   MISSING CASES   6

271

FIGHT

CODE

1. TALK ********* (37)

2. NCT INVOLVED * (1)

3. CCNFERENCE ************** (92)

4. DRCP ***** (16)

5. LISTEN ************************** (184)

(MISSING) * (1)

```
I.....I.....I.....I.....I.....I
0     40    80    120   160   200
FREQUENCY
```

MEAN	3.936	STD ERR	0.075	MEDIAN	4.603
MODE	5.000	STD DEV	1.364	VARIANCE	1.859
KURTOSIS	-C.277	SKEWNESS	-0.963	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALIC CASES 320   MISSING CASES 1

PASTOVER

CCCE

```
     I
1.   I**  ( RESIGN  7)
     I
     I
2.   I#  ( TCKEN  1)  AGREE
     I
3.   I***************  ( 252)  ACCEPT
     I
4.   I**  ( T-INK  5)
     I
5.   I*******  ( 64)  LCCK
     I
(MISSING 9)  I#  ( 2)
     I....I....I....I....I....I....I
     0   100  200  300  400  500
        FREQUENCY
```

MEAN	3.359	STD ERR	0.048	MEDIAN	3.121
MODE	3.000	STD DEV	0.869	VARIANCE	0.755
KURTCSIS	0.727	SKEWNESS	0.834	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALIC CASES 329   MISSING CASES 2

SUBORD

CODE
1. I ******************** (266)
   I SETS PLANS
   I
2. I ****** (60)
   I IMPLEMENTS
   I
(MISSING) 5. I ** (5)
   I....I....I....I....I....I
   FREQUENCY 100   200   300   400   500

MEAN	1.184	STD ERR	0.021
MODE	1.000	STD DEV	0.388
KURTOSIS	0.688	SKEWNESS	1.638
MINIMUM	1.000	MAXIMUM	2.000

MEDIAN	1.113
VARIANCE	0.151
RANGE	1.000

VALID CASES   326   MISSING CASES   5

274

FERSCNAL

COCE

1. ******************************** FCLLCW DIRECTION (179)

2. ***************************** PERSCNAL RELATION (147)

9. ** (5)
(MISSING)

FREQUENCY
0.......I.........I.........I.........I.........I.........I
 0   40   80   120   160   200

MEAN   1.451   STD ERR   0.028   MEDIAN   1.411
MODE   1.000   STD DEV   0.498   VARIANCE 0.248
KURTOSIS   -1.973   SKEWNESS 0.198   RANGE   1.000
MINIMUM   1.000   MAXIMUM   2.000

VALIC CASES   326   MISSING CASES   5

275

DISCIPL

```
CODE
  1. ************************************ (  189)
     FIRM
  2. **************************** (  139)
     OCCASIONAL
(MISSING) ** (  3)
     I....I....I....I....I....I....I....I....I....I....I
FREQUENCY  40        80       120       160       200
```

MEAN	1.424	STD ERR	0.027	MEDIAN 1.368
MODE	1.000	STD DEV	0.495	VARIANCE 0.245
KURTOSIS	-1.916	SKEWNESS	0.310	RANGE 1.000
MINIMUM	1.000	MAXIMUM	2.000	

MISSING CASES   3

VALID CASES   328

276

PERFCRM

```
   CCDE
    1. I*************************** (  222)
       I PERFORM
       I
    2. I*********** (  105)
       I FAIL
       I
(MISSING)9.I* (   4)
       I....+....I....+....I....+....I....+....I....+....I
       0        100       200       300       400       500
       FREQLENCY
```

MEAN	1.321	STD ERR	0.026	MEDIAN	1.236
MODE	1.000	STD DEV	0.468	VARIANCE	0.219
KURTCSIS	-1.416	SKEWNESS	0.770	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID CASES   327   MISSING CASES   4

ACT

```
CCCE
    I
1.  I********* (    91)
    I CVERCCME
    I
    I
2.  I****************** (   235)
    I IMMEDIATE ACT
    I
    I
9.  I** (    5)
(MISSING) I
    I......:.I......:.I......:.I......:.I......:.I
FREQUENCY  100      200      300      400      500
```

MEAN	1.721	STD ERR	0.025	MEDIAN	1.806
MODE	2.000	STD DEV	0.449	VARIANCE	0.202
KURTOSIS	-1.028	SKEWNESS	-0.989	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID CASES   326   MISSING CASES   5

PERSUADE

CCCE

1. |** (200)
   | GLIDED
2. |************************** (125)
   | INDEPENDENT
(MISSING) |** (6)
   |....I....I....I....I....I....I
   0   40   80   120 160 200
   FREQUENCY

MEAN   1.385   STD ERR   0.027   MEDIAN   1.313
MODE   1.000   STD DEV   0.487   VARIANCE 0.237
KURTOSIS -1.784   SKEWNESS   0.477   RANGE   1.000
MINIMUM   1.000   MAXIMUM   2.000

VALID CASES   325   MISSING CASES   6

279

HARMONY

CODE

1. |********************* (258)
    | FIRE
    |
2. |****** (70)
    | DISCOURAGE
    |
(MISSING) * | (3)
    |....I....I....I....I....I....I
    0   100 200 300 400 500
    FREQUENCY

MEAN   1.213   STD ERR   0.023   MEDIAN   1.136
MODE   1.000   STD DEV   0.410   VARIANCE   0.168
KURTOSIS   -0.025   SKEWNESS   1.405   RANGE   1.000
MINIMUM   1.000   MAXIMUM   2.000

VALID CASES   328   MISSING CASES   3

PUNISH

CODE
```
      I
  1.  I ********** (    121)
      I REWARD
      I
      I
  2.  I **************** (    206)
      I DISCIPLINE
      I
      I
(MISSING) I ( 4)
      I
      I....:....I....:....I....:....I....:....I....:....I
      0        100      200      300      400      500
      FREQUENCY
```

MEAN	1.630	STD ERR	0.027	MEDIAN	1.706
MODE	2.000	STD DEV	0.484	VARIANCE	0.234
KURTOSIS	-1.718	SKEWNESS	-0.541	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID CASES   327   MISSING CASES   4

281

LIST OF REFERENCES

1. Heinl, R. D., Jr., Dictionary of Military and Naval Quotations, United States Naval Institute, Annapolis, Maryland, 1978.

2. Hays, S. H. and Thomas, W. N. (editors), Taking Command, Stackpole Company, Harrisburg, PA, 1967.

3. Snyder, Q. C., Professional Development of the Military Executive, The Officer Personnel Management System, Alexandria, Virginia, May 1975.

4. Stryker, P., "Who Are the Executives? -1," The Executive Life, Doubleday and Company, Inc., Garden City, New York, 1956.

5. Bartolomé, F. and Evans, P. A. E., "Must Success Cost So Much," Harvard Business Review, Volume 58, Number 2, March-April 1980.

6. Naval Postgraduate School, An Approach to the Identification of the Potential Executive, by T. J. Leshko and C. E. Vosseteig, June 1975.

7. Gibb, C. A., "Leadership," The Handbook of Social Psychology, Volume 4, Addison-Wesley Publishing Company, Reading, Massachusetts, 1969.

8. Stogdill, R. M., Handbook of Leadership, The Free Press, New York, 1974.

9. Cox, C. M., The Early Mental Traits of Three Hundred Geniuses, Stanford University Press, 1926.

10. Jacobs, T. O., Leadership and Exchange in Formal Organizations, United States Army Organizational Effectiveness Center and School, Ford Ord, California, Nov. 1979, p. 5.

11. Chowdhry, K., "Selection of Executives and Administrators: Implications of Recent Research," Personnel Journal, Volume 48, Number 2, Feb. 1969.

12. University of Southern California, A Study of Military Leadership in Relation to Selected Intellectual Factors, by A. Marks, J. P. Guilford and P. R. Merrifield, Nov. 1979.

13. Salter, J. A. and Olmstead, J. A., Research on Assessment
    Criteria and Counseling Methods, Human Resources Research
    Organization, Alexandria, Virginia, 1974.

14. Smith, K. H., Evaluation of Leadership at the Fort
    Benning Assessment Center, Army Research Institute
    for the Behavioral Sciences, Alexandria, Virginia, 1978.

15. Geiger, C. R., The Possible Use of Assessment Centers
    in the Marine Corps: A Critical Approach, Air Command
    and Staff College, Maxwell AFB, Alabama, April 1977.

16. Army Infantry School, Assessment Center After Action
    Report, Book 1, Volume I, Fort Benning, GA, Dec. 1974.

17. Kotter, J. P., "Power, Dependence, and Effective
    Management," Harvard Business Review, Volume 54,
    Number 4, July-August, 1977.

18. Dooher, M. J. and Marting, V., The Development of
    Executive Talent--A Handbook of Management Development
    Techniques and Case Studies, American Management
    Association, New York, 1952.

19. Drucker, P. F., People and Performance: The Best of
    Peter Drucker on Management, Harper's College Press,
    New York, 1977.

20. Mintzberg, H., "The Manager's Job; Folklore or Fact,"
    Harvard Business Review, Volume 53, Number 4, July-
    August 1975.

21. Peters, T. J., "Leaders: Sad Facts and Silver
    Linings," Harvard Business Review, Volume 57, Number 6,
    Nov.-Dec. 1979.

22. U.S. Army War College, Patterns in General Officer Weekly
    Schedules and the Organizational Implications of General
    Officer Use of Time, by Col. C. F. Kriete, May 1975,
    pp. 1-28.

23. Hemphill, J. K., "Leader Behavior Description,"
    Personnel Research Board, Ohio State University,
    Columbus, Ohio (memo), 1950.

24. Cleeton, G. U. and Mason, C. W., Executive Ability:
    Its Discovery and Development, Antioch Press, Yellow
    Springs, Ohio, 1946.

25. McFarland, D. E., Management: Principles in Practice, MacMillan Publishing Company, Inc., New York, 1974.

26. Whyte, W. N., Jr., "How Hard Do Executives Work," The Executive Life, Doubleday and Company, Inc., Garden City, New York, 1956.

27. Veiga, J. F., "Do Managers on the Move Get Anywhere," Harvard Business Review, Volume 59, Number 2, March-April 1981.

28. Litterer, J. A., "Conflict in Organizations: A Re-examination," Academy of Management, Volume 9, Sept. 1966.

29. Blake, R. R., Shepard, H. A. and Mouton, J., Managing Intergroup Conflict in Industry, Gulf Publishing, Houston, Texas, 1964.

30. Tarrant, J. J., Drucker: The Man Who Invented the Corporate Society, Cahners Books, Inc., Boston, Massachusetts, 1976.

31. Air Command and Staff College, Fundamentals of Command and Staff, Extension Course Institute, Gunter Air Force Base, 1965.

32. United States Department of the Army, Field Manual 22-100, Military Leadership, Headquarters, DA, June 1973.

33. Pigors, P., Leadership or Domination, Houghton Mifflin, 1935.

34. Chemers, N. M. and Rice, R. W., "A Theoretical and Empirical Examination of Fiedler's Contingency Model of Leadership Effectiveness," Contingency Approaches to Leadership, Southern Illinois University Press, 1974.

35. Leavitt, H. J., Managerial Psychology, University of Chicago Press, 1958.

36. Packard, V., The Pyramid Climbers, Fawcett Publishers, Inc., Greenwich, Connecticut, 1962.

37. Packard, V., The Status Seekers, David McKay Company, New York, 1959.

38. Newcomer, M., The Big Business Executive: The Factors That Made Him 1900-1950, Columbia University Press, New York, 1955.

39. Whyte, W. N., Jr., The Organization Man, Doubleday and Co., Inc., Garden City, New York, 1956.

40. Levinson, H., Executive Stress, Harper and Row Publishers, New York, 1970.

41. Batten, J. D., Tough-Minded Management, AMA, New York, 1963.

42. Uris, A., The Efficient Executive, McGraw-Hill Book Company, Inc., New York, 1957.

43. Albers, H. H., Principles of Management: A Modern Approach, 3rd Edition, John Wiley and Sons, New York, Inc., 1969.

44. Flory, C. D. (editor), Managers for Tomorrow, New American Library, New York, 1971.

45. Gardner, N. D., Effective Executive Practices, Doubleday and Company, Inc., New York, 1963.

46. Jennings, E. E., The Mobile Manager: A Study of the New Generation of Top Executives, Bureau of Industrial Relations, Graduate School of Business, The University of Michigan, 1967.

47. McCay, J. T., The Management of Time, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971.

48. Naval Postgraduate School, Enhancement of Research and Development Output Utilization Efficiencies; Linker Concept Methodology in the Technology Transfer Process, by J. W. Creighton, J. A. Jolly and S. A. Denning, June 1972.

49. Fulmer, R. M., The New Management, MacMillan Publishing Company, New York, 1974.

50. Koontz, H. and O'Donnell, C., Principles of Management: An Analysis of Managerial Functions, 5th Edition, McGraw-Hill Book Company, New York, 1972.

51. Uris, A., Developing Your Executive Skills, McGraw-Hill Book Company, Inc., New York, 1955.

52. Warner, L. W., The Corporation in the Emerging American Society, Harper and Row Publishers, New York, 1962.

53. Fielder, F. E., "Engineering the Job to Fit the Manager," *Harvard Business Review*, Sept.-Oct. 1965.

54. Uris, A., *The Management Makers*, MacMillan Publishing Company, New York, 1962

55. Cribbin, J. J., *Effective Managerial Leadership*, AMA, New York, 1972.

56. Dailey, C. A., Entrepreneurial Management, *Going All Out for Results*, McGraw-Hill Book Company, New York, 1971.

57. England, G. W., "Organizational Goals and Expected Behavior of American Managers," *Academy of Management Journal*, 1967.

58. Jones, M. H., *Executive Decision Making*, Richard D. Irwin, Inc., 1962.

BIBLIOGRAPHY

Andrews, K. R., "From the Boardroom," Harvard Business
    Review, Volume 59, Number 3, May-June 1981, pp. 18-26.

Bass, B. M. and Burger, P. C., Assessment of Managers,
    The Free Press, New York, 1979.

Belasco, J. A., Hampton, D. R. and Price, K. F., Management
    Today, John Wiley and Sons, Inc., New York, 1975.

Byars, L. L. and Rue, L. W., Management: Theory and
    Application, Richard D. Irwin, Inc., Homewood, Illinois,
    1977.

Chapple, E. D. and Sayles, L. R., The Measure of Management,
    The MacMillan Company, New York, 1961.

Coates, C. H. and Pellegrin, R. J., Military Sociology:
    A Study of American Military Institutions and Military
    Life, The Social Science Press, University Park,
    Maryland, 1970.

Cohen, S. L. and Sands, L., "The Effects of Order of
    Exercise Presentation on Assessment Center Performance:
    Once Standardization Concern," Personnel Psychology,
    Volume 31, Number 1, Spring 1978, pp. 35-45.

Dowling, W. F., Jr. and Sayles, L. R., How Managers Motivate:
    The Imperatives of Supervision, McGraw-Hill Book Company,
    New York, 1971.

Dyer, F. N. and Richard E. H., Using an Assessment Center
    to Predict Field Leadership Performance of Army Officers
    and NCO's, Army Institute for the Behavioral and Social
    Sciences, Alexandria, Virginia, 1979.

Edwards, J. D., Executives: Making Them Click, University
    Books, New York, 1956.

Fiedler, F. E., A Theory of Leadership Effectiveness,
    McGraw-Hill, Inc., New York, 1967.

Fleishman, E. A. and Hunt, J. G., Current Developments in
    the Study of Leadership, Southern Illinois University
    Press, 1973.

Fraser, J. M., "The Group Method of Selecting Key Personnel,"
    Selection of Management Personnel, American Book-
    Stratford Press, Inc., New York, 1957.

Green, G. G. and Nebeker, D. M., "The Effects of Situational
    Factors and Leadership Style on Leader Behavior,"
    Organizational and Human Performance, Volume 19,
    Number 2, August 77, pp. 368-377.

Headquarters Department of the Army, Review of Education
    and Training for Officers, Volume I, June, 1978.

Hellriegel, D. and Slocum, J. W., Jr., Management: Contingency
    Approaches, Addison-Wesley Publishing Company, Reading,
    Massachusetts, 1978.

Hill, G., "Choosing a Leadership Style," Industrial
    Management, Volume 19, Number 1, Jan.-Feb., 1977,
    pp. 22-24.

Helme, W. H. and Uhlaner, J. E., Relationship between Leader
    Knowledge and Directive Behavior, Army Research Institute
    for the Behavioral and Social Sciences, Alexandria,
    Virginia, 1979.

Helme, W. H., Willemin, L. P. and Day, R. W., "Psychological
    Factors Measured in the Differential Officer Battery,"
    Army Behavior and Systems Research Lab, Arlington,
    Virginia, July, 1971.

Helmich, J., "Executive Succession in the Corporate
    Organization," Academy of Management Review, Volume 2,
    Number 2, April 77, pp. 252-266.

Janowitz, M. (editor), The New Military, Russell Sage
    Foundation, New York, 1964.

Janowitz, M., The Professional Soldier, The Free Press,
    Glencoe, Illinois, 1960.

Kazmier, L. J., Principles of Management, McGraw-Hill Book
    Company, New York, 1974.

Kellogg, E. C., "The Topflight Supervisor: A Profile,"
    Leadership on the Job, American Management Association,
    Inc., 1966.

Killian, R. A., Human Resource Management, AMACOM, New York,
    1976.

Lerbinger, O. and Sperber, N. H., Key to the Executive Head, Addison-Wesley Publishing Company, Reading, Massachusetts, 1975.

Levinson, C., "Reaching the Top--Criteria for Choosing Chief Executives," San Francisco Chronicle and Examiner, 3 April 1980.

Livingston, R. T. and Waite, W. W., The Manager's Job, Columbia University Press, New York, 1960.

Martin, M. and Edginton, R., "Make Your Management Style Flexible," Canadian Business, Volume 50, Number 3, March 77, pp. 84-88.

Maurer, H., "Who Are the Executives? II," The Executive Life, Doubleday and Company, Inc., Garden City, New York, 1956.

McCall, M. W. and Lombardo, M. M., Leadership, Duke University Press, Durham, NC, 1978.

Medland, F. F., Yates, L. C. and Downey, R. C., Associate Ratings of Senior Officer Potential, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, Virginia, June 1974.

Merrill, H. F. and Marting, E., Developing Executive Skills, American Management Association, New York, 1958.

Mulary, R., "Leadership Styles for eredit Executives," Credit and Financial Management, Volume 78, Number 3, March 76, pp. 28-29.

Mylander, M., The Generals, The Dial Press, New York, 1974.

Naval Postgraduate School, Executive Selection: A Method for Identifying the Potential Executive, by H. W. Rowe, J. C. Rudeen and J. M. Wenke, Sept. 1976.

Naval Postgraduate School, A Plan for the Evaluation of Leadership Training in the United States Army, by J. E. Davies, June 1980.

Nie, N., Bent, D. H., Hull, C. H., Jenkins, J. G. and Steinbrenner, K., Statistical Package for the Social Sciences, McGraw-Hill Book Company, New York, 1975.

Page, H. E., "Detecting Potential Leaders," Journal of Aviation Medicine, Volume 19, Number 3, 1948, pp. 435-441.

Randle, C. W., "How to Identify Promotable Executives,"
    Harvard Business Review, Volume 34, Number 3, May-June
    1956, pp. 122-134.

Sands, E., How to Select Executive Personnel, Reinhold
    Publishing Corporation, New York, 1963.

Sayles, L. R., Individualism and Big Business, McGraw-Hill
    Book Company, New York, 1963.

Sayles, L. R., Managerial Behavior, McGraw-Hill Book
    Company, New York, 1964.

Schleh, E. C., Executive Management of Personnel, Prentice-
    Hall, Inc., 1958.

Shingleton, J. and Bao, R., College to Career, McGraw-Hill
    Book Company, New York, 1977.

Steiner, R., "New Use for Assessment Centers--Training
    Evaluation," Personnel Journal, Volume 54, Number 4,
    April 1975, pp. 236-248.

Stouffer, S. A., Suchman, E. A., DeVinney, L. C., Star, S. A.
    and Williams, R. M., Jr., The American Soldier, Princeton
    University Press, 1949.

Tregoe, S., "Today's Leader--An Endangered Species,"
    Training and Development Journal, Volume 30, Number 6,
    June 1976, pp. 22-26.

Utecht, R. E. and Heier, W. D., "The Contingency Model and
    Successful Military Leadership," Academy of Management,
    Volume 19, Number 4, Dec. 1976, pp. 606-618.

Vroom, V. H. and Yetton, P., Leadership and Decision Making,
    University of Pittsburgh Press, Pittsburgh, PA, 1973.

Williams, R., "Examining Leadership Style," The Personnel
    Administrator, Volume 21, Number 1, Jan. 1976, pp. 22-34.

INITIAL DISTRIBUTION LIST

No. Copies

1. Defense Technical Information Center   2
   Cameron Station
   Alexandria, Virginia 22314

2. Library, Code 0142   2
   Naval Postgraduate School
   Monterey, California 93940

3. Department Chairman, Code 54   1
   Department of Administrative Sciences
   Naval Postgraduate School
   Monterey, California 93940

4. Professor J. W. Creighton, Code 54Cf   35
   Department of Administrative Sciences
   Naval Postgraduate School
   Monterey, California 93940

5. Professor R. A. McGonigal, Code 54Mb   6
   Department of Administrative Sciences
   Naval Postgraduate School
   Monterey, California 93940

6. Captain Mark W. Boyer   3
   1038 Spruance
   Monterey, California 93940

7. Captain Andrew E. Adams   5
   270 Ellwood Avenue
   Satellite Beach, Florida 32937

8. Professor Carson Eoyang, Code 54Eg   1
   Department of Administrative Sciences
   Naval Postgraduate School
   Monterey, California 93940

9. Assistant for Analysis, Evaluation (NMPC-6C) 1
   Human Resources Management & Personal
     Affairs Department
   Navy Military Personnel Command
   Washington, D.C. 20370

10. Director, Human Resource Management   1
       Division (NMPC-62)
    Human Resource Management & Personal
       Affairs Department
    Navy Military Personnel Command
    Washington, D.C.   20370

11. Director for HRM Plans and Policy (OP-150)   1
    Human Resource Management Division
    Deputy Chief of Naval Operations (Manpower,
       Personnel & Training)
    Washington, D.C.   20370

12. Commanding Officer   1
    Human Resource Management School
    Naval Air Station Memphis
    Millington, Tennessee   38054

13. Commanding Officer   1
    Human Resource Management Center London
    Box 23
    FPO New York   09510

14. Commanding Officer   1
    Human Resource Management Center
    5621-23 Tidewater Drive
    Norfolk, Virginia   23509

15. Commanding Officer   1
    Human Resource Management Center
    Naval Training Center
    San Diego, California   92133

17. Commanding Officer   1
    Organizational Effectiveness Center & School
    Fort Ord, California   93941

18. Commanding Officer   1
    Human Resource Management Center
    Commonwealth Building, Room 1144
    1300 Wilson Boulevard
    Arlington, Virginia   22209

19. Dr. J.A. Jolly   1
    905 Dunbarton
    Sacramento, California 95825

20. Dr. Stephen Laner   1
    Management Sciences Staff
    U.S. Forest Service
    P.O. Box 245
    Berkeley, California 94701

21. Dr. David Feldmen   1
    Dean, College of Business
    United States International University
    Palmerado Rd.
    San Diego, California 92132

22. The Honorable John O. Marsh, Jr.   1
    Secretary of the Army
    Pentagon 3E718
    Washington, DC 20310

23. Assistant Secretary of the Army   1
    Manpower and Reserve Affairs
    Pentagon 2E594
    Washington, DC 20310

24. Army Chief of Staff   1
    General E. C. Meyer
    Pentagon 3E668

25. Deputy Chief of Staff for Personnel   1
    U. S. Army
    Pentagon 2E736
    Washington, DC 20310