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THE RELATIONSHIP OF PERSONALITY, ROLE EXPECTATION, SELECTION CRITERIA SCORES, AND SELECTED DEMOGRAPHIC VARIABLES UPON SELECTION INTO THE EDUCATIONAL MANAGEMENT TRAINING PROGRAM IN HAWAII

University of Hawaii

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THE RELATIONSHIP OF PERSONALITY, ROLE EXPECTATION, SELECTION CRITERIA SCORES, AND SELECTED DEMOGRAPHIC VARIABLES UPON SELECTION INTO THE EDUCATIONAL MANAGEMENT TRAINING PROGRAM IN HAWAI'I

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION IN EDUCATIONAL ADMINISTRATION

May 1983

By

Michael A. S. Chun

Dissertation Committee:

John A. Thompson, Chairman
Charles Araki
Sheldon Varney
Mitsuo Adachi
Fred Braun
Throughout the months since this study began, I have had the guidance or encouragement from people who have been close to me, either in a professional capacity or as friends. I wish to acknowledge their contribution to the completion of this study.

I would like to acknowledge the help rendered to me by my committee chairman John Thompson throughout the conceptualization and writing of this dissertation. His encouragement and advice reflected the same professional help given me since he first spoke to me on becoming a doctoral candidate and during the period when coursework were being pursued. His queries helped strengthen many of the concepts I have often taken for granted. He kept me going when it was necessary and was always there when needed. Without his help this study would not have been completed.

I am grateful as well to other committee members, Mitsuo Adachi, Charles Araki, Fred Braun, and Sheldon Varney for their patience and guidance given me on the many features of the dissertation. I am thankful to the secretary Susan Omori for her patience in always finding the time when I needed to meet with any of the committee members.

Finally, a special thanks to my wife Audrey who never doubted that this study could be done.
ABSTRACT

The purpose of this study was to test series of hypotheses and answer ancillary questions on: one, the accuracy of the Hawaii State Department of Education (D.O.E.) Educational Management Training Program (EMTP) selection criteria (Academics, Interview, Observation, and Peer Evaluation) in the selection of candidates to become educational administrators. Two, the degree to which groups of selectees, non-selectees, and a sample of practicing educational administrators differed on their response to a set of inventories which represented their perception of role expectations and need dispositions. Three, a comparison of selected personal characteristics (age, years of service in the department, and sex) to determine whether there were systematic differences between those who were selected to be potential administrators and those who were not.

The population of the study were all the people who have volunteered for the EMTP from 1976 through 1982. The subjects in the sample were the candidates who participated in the EMTP, Phase I selection process during 1976, 1977, 1978, and a purposive sample of educational administrators who served as observers and raters during the process. The methodology employed was a comparison for differences between the selectees and non-selectees on their scores on
the EMTP selection criteria, the sub-scale scores on the personality and role expectation inventories (the Managerial Philosophies Scale, Management of Motive Index, and Fundamental Interpersonal Relations Orientation-Behavior), and scores on the EMTP, Phase I selection criteria. The educational officers were also compared to the selectees and non-selectees on personal characteristics and the personality and role expectation inventories. The three groups, the selectees, the non-selectees, and the educational officers, were designated as the independent variables and the four EMTP, Phase I selection criteria, sub-scales on the personality and role expectation inventories, and the data on the personal characteristics were the dependent variables.

The data were analyzed using the following statistical procedures: t-test to identify the differences between the groups on age, years of service, EMTP selection criteria, and personality and role expectation sub-scale measures; a chi-square to determine whether differences existed between the groups on the sex trait; and, discriminant analysis to determine which traits made a significant contribution to a candidate either being selected or not into the leadership group.

The major findings from the hypotheses and ancillary questions which were posed to test the purposes listed above
were:
The selectees scored higher than the non-selectees on each EMTP, Phase I selection criteria. The significance of the t-test on the difference between the groups for each criterion was at the \( p = .000 \) level. However, after performing a discriminant analysis on the four variables, only three (Academics, Interview, and Peer Observation) were found to discriminate between candidates being selected or not selected into the educational officer's group. Using the three criteria, 80.8 per cent of the cases were correctly classified. The EMTP, Phase I criterion Observation failed to reach the required level of significance to be included as an effective contributor to the selection or non-selection process.

The Managerial Philosophies Scale and the Management of Motive Index inventories indicated that the non-selectees were more Theory X, or traditionally, oriented in their managerial philosophy, and showed a greater need for Basic Creature Comforts than the selectees.

On the FIRO-B sub-scale measures, the selectees tended to be more similar to the sample of administrators who served as observer/raters than the non-selectees. Of the ten sub-scales measures, there were no significant differences between the selectees and observer/raters on eight measures, while the non-selectees differed from the observer/raters on
six measures.

A discriminant analysis was run on the personality and role expectation inventories (MPS and MMI) for the selectees and non-selectees; three sub-scale measures were factored out which could contribute to the candidates either being selected or not selected into the educational officer's group. The sub-scales were Theory X, Theory Y, and Basic Creature Comfort. Using only the scores on these three variable measures, it was possible to properly classify 64.2 per cent of the candidates.

The findings relative to the differences in certain personal characteristics revealed that the selectees were younger \( (p=.009) \) and had more years of service in the D.O.E. \( (p=.01) \). However, there was no significant difference between the selectees and non-selectees on the basis of their sex.

Based on the findings, the following conclusions are indicated:

1. Only three EMTP, Phase I selection criteria (Academics, Interview, and Peer Evaluation) were identified as effective contributors to the selection process. The discriminant analysis did not factor out the criterion Observation as an effective selection technique. Its continued use in the EMTP, Phase I Program should be questioned.

2. The fact that the cut-off score on the EMTP selection criteria which was used to select the successful candidates
(twenty per cent of each group each year) varied from year to year would appear to indicate a lack of consistency in the standards used for selecting candidates into the educational leadership group. A score which would have qualified one for selection in one year might not have sufficed in another. The lack of continuity in scoring from one year to the next may have deprived the D.O.E. of additional candidates.

3. When the discriminant analysis was run on EMTP, Phase I selection criteria, the results indicated the possibility that forty-four or more non-selectees may have been qualified since their qualifications were similar to those of the selectees.

4. The D.O.E. has scores on the personality and role expectation inventories (MPS, MMI) for each of the candidates who have participated in the EMTP, Phase I sessions, but they have not been used systematically in the selection process. The discriminant analysis has shown that three of the sub-scales (Theory X, Theory Y, and Basic Creature Comfort) can be used to contribute to the selection process.

5. Using the results from the FIRO-B measures, there are indications that the department may be selecting a new group of administrators who have personality and institutional attributes which are very similar to those of the current group of administrators.
6. Based on the results of the study, the conclusion that the D.O.E. has been successful in selecting candidates who meet the institutional role expectations for its educational officers is warranted. Also, one may conclude that the needs disposition of the selectees are congruent with those expectations. Finally, the scores on the inventories indicate the selectees were more prone to be "risk takers" (a quality which is generally associated with successful leadership) than those not selected.
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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Chapter I contains an introduction to the study and statement of the problem. The introduction includes a section on the history of the selection procedures and an indication of the mix of leadership qualities that the Hawaii State Department of Education desires in its educational officers. A discussion of the conceptual framework and its purpose in the study are also presented. The statement of the problem includes purpose and the hypotheses and research questions to be studied. Chapter I also includes a discussion of the limitations of the study.

Introduction

The study of the concept of leadership and the relationship it may have to the personality traits of incumbent educational officers, as well as those who may aspire to such posts, has and continues to provide a major theme for research in the field of educational administration. The interrelationship of the two factors has meant many things to many people, and when members of the educational community, parents, students, and the community at large express concern about an educational officer or administrator they may be, in one way or another, reacting
to aspects of either his or her leadership style or personality characteristics. Since many interactive factors make up personality and leadership styles, agreement about the mix of characteristics which may contribute to the creation of successful administrators has seldom been achieved. However, it does appear that the expectations for leadership are not the same today as they have been in the past, and future expectations undoubtedly will differ markedly from either the past or the present.

As the agency directly involved with the selection and placement of educational officers (i.e., principals and vice principals), the Hawaii State Department of Education (DOE) has had particular interest in attempting to determine what factors constitute an optimal mix of personal and organizational qualities desirable in its educational administrators. The past efforts of the DOE to address this problem in the selection, training, and placement of educational officers are reviewed in the next section of this study.

Overview of the Hawaii State Educational System

Hawaii, the 50th State of the Union, is made up of seven islands: Oahu, Hawaii, Maui, Kauai, Lanai, Molokai, and Niihau. The public schools on these islands are all operated as a single school system, the Hawaii State Department of Education (DOE). The members of the Board of
Education for the district are elected by the populace and are charged with the overall management of the system. The development of policies and directions in the management of the school system have been the responsibility of the board, as is true in most school districts, but the taxing and resource allocation function are under the direct control of the state legislature rather than the Board of Education. To assist the board in its deliberations there are seven School Advisory Councils whose members are appointed by the Governor of the State of Hawaii.

The Department of Education is divided into seven districts, four on the island of Oahu, one on the island of Hawaii, one on Maui, and one on Kauai. There are over two hundred and twenty public schools which service one hundred and sixty thousand plus students. The department employs some five thousand teachers and counselors. The administrators for the system number over six hundred.

Issues and concerns of the Department of Education are similar to those commonly found in school districts throughout the states of the union. They include problems related to: curriculum development, servicing of regular and special student populations; student evaluation, inservice of teachers, and the identification and development of new educational officers for the department.
Previous Efforts to Select and Train Educational Administrators

An overview of the role of the Hawaii State Department of Education in the development of programs for the selection and training of school level administrators from the 1950's to the present is presented. Verbal descriptions by retired and very senior educational administrators\(^1,2,3,4\) of the Hawaii State Department of Education, plus the rather meager number of departmental records\(^5\) written during the last twenty years, seem to indicate that the process of seeking principals from within the ranks of the Department of Education personnel was essentially highly unorganized and tended to be somewhat informal.

Prior to the 1950's; written records of the techniques or programs for the selection and training of principals and other educational officers were limited\(^6\) and occasionally inaccurate in detail. It would appear that the selection and appointment of administrators, or as they are termed in Hawaii, educational officers, to positions prior to 1950 were primarily predicated upon recommendations from both the lay and educational leadership of the various communities in which the schools were located\(^7,8,9,10\). A typical case might have been one where the district superintendent received a recommendation about a likely candidate for an administrative position. After a perusal of the candidate's personnel records and a series of interviews, the person
was appointed into the first available educational leadership position. For local candidates, there did not appear a requirement that they undertake formal academic training in administration. The selectees were left on their own to administer the school.\textsuperscript{11,12,13} It should be noted, however, that since a number of the superintendents were hired from the continental United States, they brought a number of experienced and trained principals with them to administer the schools.\textsuperscript{14,15} These individuals had been subjected to the certification standards then in effect in the states from which they came. Consequently, there was a gap in terms of the formal training between the local incumbents and those from the continent.

In 1957 the Department of Education instituted a more structured program for the recruitment, academic preparation, and placement of educational officers which was called the Leadership Training Program (LTP).\textsuperscript{16} The program was open to all applicants who possessed a professional teaching certificate plus three years of successful teaching experience. The candidates for the program were required to take examinations for selection into the LTP Program. Data on the specific examinations or inventories used for this period are not available in the department's written records. It can be surmised, however, that the Department of Education used selection processes already on hand. They included the use of the candidates' personnel
After selection into the LTP, candidates had to complete a program which consisted of twenty-four semester hours of course work at the University of Hawaii. Training of the selected candidates included weekly seminars at the university and a limited form of internship at one of the public schools. Appointments to educational officer positions were generally as vice-principal. While the Leadership Training Program was initially a two-year program, it was scaled down to a one year period in the early 1960's. Currently, there are no analytic studies of the effect of the Leadership Training Program (LTP) on either the quality of leadership or the personality characteristics of the candidates selected. The Department of Education's only claim to validity for any of its selection processes or program was based on empiricism.

During the early 1960's the Office of Personnel Services within the Department of Education leaned toward instituting certain changes in the Leadership Training Program (LTP). Refinements were made in the assessment of the potential candidates and the training program was made more intensive. The Leadership Training Program was re-named the Administrative Internship Program. The first group of selected candidates began their training in 1961. Like the LTP, all candidates who possessed a
professional teaching certificate and three years of teaching experience were eligible to apply. Each candidate underwent an eight hour battery of tests known as the Professional School Administrator's Examination.\textsuperscript{22,23} They include the Miller Analogies Test, the Administration and Supervision Examination, the Minnesota Teacher Attitude Inventory, the Strong Vocational Interest Inventory, and the California Psychological Inventory. Additionally, a written autobiography was required of each candidate. The educational background and experiences and the ratings from five references of each candidate were then scrutinized against the tests and inventory results.

An interview of each of the candidates followed. It should be noted that while personality structure and adjustment in the evaluation process were factors in the recruitment of candidates, the scores on the instruments cited above were also used by evaluators to arrive at an assessed judgment of each of the candidates. While there were no passing scores on the series of exams, the pattern of the scores achieved on the various instruments was important in the selection of candidates to be a part of the Administrative Intern Program.\textsuperscript{24}

The candidates who were selected were relieved of their teaching assignments for one semester when they were selected to be part of the program. During the semester the candidates served three days a week in a school as an
intern under an experienced principal. A professor from the Department of Education Administration, University of Hawaii, supervised each intern. The intern was expected to maintain a record of his experiences as an on-the-job assistant to the principal, or in a few cases, an administrative officer at a different level in the Department of Education hierarchy.

During the other two days of the week, the interns gathered at a central training site and worked under the tutelage of the professors from the Department of Educational Administration. They deliberated on a variety of case studies, did course work, went on field trips and visitations to various educational institutions, participated in group or individual projects, and held conferences with the professors.

In the course of the semester, the intern attended two evening counseling sessions per week with a professional psychologist. The purpose of the sessions was twofold: (1) they aided members to better understand and handle their personal lives, and (2) they helped to identify those interns who may have possessed major personality problems.

After the interns successfully completed the one semester program, they were officially eligible to compete for vacant administrative positions. However, before they could receive a Hawaii State Department of Education Administrator's Certificate, they had to complete twenty-one
semester hours of course work in the Department of Educational Administration at the University of Hawaii.

The AIP Program continued until 1974, when funding constraints brought it to a halt. From 1973 to 1976, there were no recruiting or training programs, and as a result no new administrators were trained. Vacancies were filled with members who had completed the AIP Program and were waiting for a position as vice principal.

Current Efforts to Select and Train Educational Administrators

During the year 1976, a new program called the Education Management Training Program (EMTP) was developed. Its purpose was to recruit, train, and select from a pool of candidates a cadre of people to fill the ranks of school-level administrators. Those chosen were primarily members who exhibited strong management and leadership potential.

Quoted below is the EMTP Selection Process Philosophy:

The selection process is a vital key to the success of this project.

The importance of the selection process dictates that the identification and selection of candidates shall be accomplished by recognized and strongest managerial and leadership personnel within the department.

The success of this project depends heavily upon the ability of the selectors to recognize and appraise qualitatively or comparatively, the significantly sought characteristics of candidates.

Potential leadership characteristics sought are general intelligence, individuality, motivation, creativity, independence, and innovativeness.
The potential individual should be action-oriented and willing to take the risk of expediting matters quickly at the expense of possible mistakes and failures. He must be a "doer" as well as a "thinker".

It is acknowledged that many of the qualities sought cannot be measured with any scientific or reasonable validity and reliability. Much will depend upon the selector's skill in identifying potential leaders.

A strong educational background shall play a secondary role to strong leadership and successful management potential......

It should be noted from the above philosophy that individuality, motivation, creativity, independence, and innovativeness were perceived to be important characteristics of the potential leader.

Most of the policy, procedures, and activities for the conduct of EMTP were explained to the researcher by a senior Personnel Specialist in the Personnel Certification and Development Section, Department of Personnel, Hawaii State Department of Education. This specialist had been significantly involved in the day-to-day and long-range operation of the EMTP Program for over six years. His explanation of rules and procedures were taken as departmental policy since the written policies and procedures were non-existent (although they are expected to be forthcoming at a future date). It should be noted that a more definitive description or treatment of the program is being described herewith as the researcher had spent two summers as an observer and/or assistant to the aforementioned...
Department of Education Personnel Specialist, Personnel Certification and Development Section.

Like the LTP and AIP, application to the EMTP has been open to all persons who possess a State of Hawaii Professional Teaching Certificate and the requisite number of years of teaching experience. However, the teaching experience requirement was raised from three to five years.

Individual educational experience and background data were collected from each candidate and were evaluated by a committee. It should be noted that no academic training was required prior to entry into the program.

The Education Management Training Program has been divided into three phases: EMTP, Phase I, Phase II, and III. Candidates who were successful in meeting the entry requirements stated above were invited to participate in a voluntary two-week EMTP, Phase I session. A maximum of 60 members were invited to participate in each two-week session. Two sessions were held in the summers of 1976, 1977 and 1978. The personnel who participated in one of the sessions underwent the following:

1. A battery of personality and role expectation inventories was administered:
   (a) The Managerial Philosophies Scale
   (b) The Management of Motives Index
2. The participants were exposed through classwork or lecture format to the DOE structure, policies and procedures,
as well as its problems and issues.

3. They were exposed through classwork or lecture format to the skills and knowledge of administration, curriculum, industrial relations, and personnel services and procedures.

4. The participants were exposed to group work in-basket case study exercises. They had to utilize their skills in human relations, problem resolution, and decision-making.

5. During the case study sessions each member was scheduled to be observed in different group settings. Observers, all of whom were Department of Education educational officers, were in-serviced in observation techniques. During the two-week period each applicant member underwent observation by at least six different observers.

6. Homework assignments were given and graded; quizzes and examinations on sub-sections of the materials presented were administered; and, a mid-term and final examination were held.

7. During the evenings of the two-week session, individual members were interviewed by a committee of three or more State Department of Education educational officers. Each participant was rated on the manner with which he or she responded to the questions of the interview committee. The committee members would judge the participant being interviewed as to his or her display of knowledge, attitude, type of response to questions, self-control during the interview, and leadership potential.
8. During the entire two-week session, the participants made peer evaluations of other members. The evaluations purportedly reflected on the leadership qualities of each member.

After the close of each session the scores and ratings listed below on all the members were compared:
1. Homework grades
2. Grades from quizzes
3. Mid-term examination grade
4. Final examination grade
5. Observation ratings
6. Interview ratings
7. Peer observation ratings

It should be noted that the measures on the battery of tests in leadership traits and personality factors, (see page 11) though considered, did not form a part of the selection criteria. The scores on the seven tests and ratings were categorized into four sections:
1. Academic Coursework
2. Interview Rating
3. Observation Rating
4. Peer Observation Rating

Members who scored highest on all four scores and ratings were selected into EMTP, Phase II, a one-semester on-the-job training as an educational administrator.

During the year 1976, 18 members were selected into
the second phase, 17 in 1977 and 13 in 1978. The Phase II members were expected to undergo a mandatory inservice program held at various times of the week. Upon completion of EMTP, Phase II, members awaited for a probationary educational administrator appointment (EMTP, Phase III); however, the appointment was not under the jurisdiction of the EMTP project.

Since June 1976, the Department of Education has been conducting EMTP, Phase I sessions on an annual basis. While at the beginning there were two sessions conducted during the 1976, 1977, and 1978 summer months, the current practice has been one EMTP Phase I session per year.

Thus, it can be surmised that the identification, selection, and training of educational officers has undergone incremental changes during the last thirty to forty years. From a period where the administrators were selected mainly on the basis of recommendations and interviews by community lay and educational leaders, to a time when they had to undergo a battery of examinations, interviews, university courses, and an on-the-job training, to spending a semester as an intern while receiving both university and Department of Education training, the Department of Education now has the EMTP Program to identify and train the cadre of educational officers it needs to fill its school level educational ranks.
The Theoretic Framework for the Study

The present investigation was based on concepts developed by Talcott Parsons, Jacob W. Getzels, and Egon C. Guba. Parsons formulated a general theory of formal organization with an emphasis on the social systems. Getzels and Guba further developed these concepts and created a descriptive theory which they titled a Social Systems Model. They viewed administration as a hierarchy of super-ordinate-subordinate relationships; the social system was conceived as an involvement of two classes of phenomena which are conceptually independent and phenomenally interactive. One class began with the institution with its prescribed roles and expectations that led to the fulfillment of the goals of the institution; the other class began with the individual with his values, personality, and needs. The interaction of the two classes resulted in observed behavior. The institution, role, and expectations made up the nomothetic dimension of activity in the social system, while the individual, personality and need-disposition were described as the idiographic dimension.

It is to be noted that roles in institutions are purposive, externally structured, normative, and are sanctioned by the institution through the assignment of a descriptive title such as teacher, principal, superintendent, and so forth. Each role carries with it a set of role expectations which describe the behaviors, acts, and
obligations that are expected from the role incumbent.

In the idiographic dimension of the social system, personality which is the dynamic organization within an individual is represented by the need dispositions that determine his response or reactions to the environment or the expectations of the environment. The need disposition is seen as a tendency to be oriented to and act to experiences in a certain manner and to expect certain reactions or results from his actions. A Social Systems Model is presented in Figure 1.

![Social Systems Model Diagram]

**Nomothetic Dimension**
- Institution → Role → Expectation
- Social System → Observed Behavior
- Individual → Personality → Need-Disposition

**Idiographic Dimension**

**Figure 1**

Social Systems Model
The relationship between role and personality, each of which is conceptually independent and at the same time interactive with the other, may be expressed in the formula below.

\[ B = f (R \times P) \]

\( B \) is an observed behavior, whereas \( R \) represents an institutional role with expectations attached to it, and \( P \) as the particular role incumbent's personality and need-disposition. The formula expresses a given behavior as being a simultaneous interaction of both nomothetic and idiographic dimensions; this behavior is the result of an attempt to deal with the environment, with its pattern of expectations that the role incumbent has been given and to his own behavioral expectations which are consistent with his own needs. The graphic representation below depicts the proportionate degree or amount that role and personality factors may have on behavior. The amount of personality and role factors which determine behavior vary with the specific personality involved, the specific act itself, and the specific role called for.
A specific behavioral act may be seen as a dotted vertical line intersecting both role and personality dimensions. On the left, the amount of the behavior that is expected or demanded by role expectations is relatively large; on the right, the amount of behavior that is expected or demanded by personality is large.

The feeling of achievement and satisfaction an individual experiences in carrying out or participating in a given situation is determined by agreement or disagreement between the nomothetic and idiographic dimensions. One's satisfaction toward a given situation or experiences is an expression of the closeness of the two dimensions. The more one perceives or experiences a disagreement between the two dimensions, the more unsatisfied he will be; while the greater agreement, the more satisfaction one will experience.

From among the conceptual possibilities generated by the model, the present study utilized the Social Systems Model as a basis for the examination of behavior in both the nomothetic and idiographic dimensions. In the previous section the researcher has noted the organizational demands or role expectations which the Department of Education perceived as important for the position of leadership as school administrators. The idiographic dimensions of this study focused on identification of selected personality traits of both selected and non-selected candidates which
the researcher believed were representative of the need disposition of those individuals. Several possibilities emerged from the theoretic construct among which were the following: (1) Are the role expectations as defined congruent with the selection process; (2) Are there certain personality traits which predict leadership as defined by the role expectations; (3) Is there a conflict between the organization (nomothetic) and human (idiographic) dimensions; (4) Is leadership a part of the role expectation for administrators in the DOE?

The study focused upon the relationship of role expectation and personality characteristics on the role behaviors that are either found or expected in educational officers. In the main, these characteristics were expected to be heavily weighed toward the nomothetic dimension.

While the major theoretic underpinning of the study focused on role behaviors that were found or expected in educational leaders, and more specifically with concepts developed by Parsons, Getzels, and Guba, it was also influenced by concepts of other renowned authors in the field, such as John K. Hemphill and Andrew W. Halpin.

Hemphill, in his article "Administration as Problem-Solving", characterized leaders as those who should be able to view or handle groups in a mutual problem-solving arena. He postulated that the leader needed be cognizant of the attitudes and perceptions of each member
so that problem solving would be perceived as a group function and not exclusively as a personal function. He stated that a group problem might be perceived in three manners: (1) The resolution occurred by chance naturally or without conscious effort. The mode of resolution often would be the same one which had been used to solve a similar problem of the past; (2) the group acted in an impersonal and expected manner in their deliberations. With pre-formulated rules or regulations, they worked toward the solution to the problem; and (3) the group responded to one of the group leaders as he brought out group perceptions and interactions.31

Andrew Halpin's32 concepts on leadership focused on two distinct features in leader behavior, namely consideration and initiating structure. Halpin analyzed and described consideration as that behavior indicative of the leader's demonstration or expression of friendship, mutual trust, respect, and a feeling of warmth he gave to his subordinates. His description of initiating structure referred to the relationship the leader had defined and expected from his subordinates. It referred to the role behavior he expected from each of his subordinates, including the amount of well-defined behaviors he expected from them, the channels of communication he expected his subordinates to follow, and procedures which subordinates or group members were expected to use in given situations. As the leader is
viewed in both consideration and initiating dimensions by his subordinates and superiors, a show of too much or overemphasis in consideration might gain him a high regard from the subordinates, but low performance rating from his superiors. Conversely, if the leader was viewed as overemphasizing initiating structure and not showing much effort in consideration concerns by his subordinates, it is likely that they would develop a mind set that tasks or jobs were being done at the expense of their personal well-being. This might mean a higher performance rating by the leader's superior, but a lower regard given to him by his subordinates. Halpin stated that for a leader to be judged as doing well, the leader would need to be one who exhibited much evidence that he was cognizant of and used both consideration and initiating structure with his subordinates.33

The major theoretic framework for this study was based on the Social Systems Model as developed by Getzels and Guba. Several of the hypotheses were predicated upon certain constructs which were posed in the model, and a significant portion of the research was based upon an effort to empirically test the concepts of role expectation and need disposition. However, the concepts from Hemphill and Halpin have also influenced the study, both from the conceptualization of administration as problem-solving and the focus upon consideration and initiating structure.
Statement of the Problem

Purpose of the Study

The purpose of the study was to test a series of hypotheses on (1) the accuracy of the selection criteria of the EMTP and (2) to the degree to which differences among the groups of selectees, non-selectees, and practicing administrators in their perceptions of role expectation and need disposition might be equated with selection into the second phase of the EMTP Program. A third aspect of the study sought to identify and compare certain personal characteristics, i.e., age, length of prior service in the Department of Education, and sex, to determine whether there were systematic differences between those who were selected into the leadership rank, and those who were not. Specifically, an attempt was made to determine the part that personality, role expectation, and demographics played in the selection of educational administrators in Hawaii.

Problem to be Investigated

This exploratory study, which was one of the first of its kind in the State of Hawaii, sought to investigate the following problems:
First, to analyze the criterion variables used in EMTP, Phase I to select members into the educational leadership ranks. The variables used included academic scores, interview scores, observation scores, and peer evaluation scores. Second, to analyze the demographic variables of sex, age,
and number of years of employment in the State Department of Education and to determine the degree to which they contributed to the selection or rejection of various candidates into the later stages of the EMTP.

Third, to identify as well as analyze role expectation and personality traits in terms of the contribution they make towards the determination of candidates to be selected into EMTP, Phase II.

**Hypotheses**

The following hypotheses were advanced to place the various aspects of the problem into a testable form:

**Hypothesis I:** There is no significant difference between the demographic variables and the mean scores on measures of EMTP, Phase I Selection Criteria between those selected into the leadership ranks (EMTP, Phase II) and those not selected.

**Hypothesis II:** There is no significant difference between the mean scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index for those selected into the leadership ranks (EMTP, Phase II) and those not selected into the leadership ranks.

**Hypothesis III:** There is no significant difference between mean scores on the sub-scales of FIRO-B for the selectees and a sample of non-selectees.

**Hypothesis IV:** There is no significant difference between the demographic variables and the mean scores on the
sub-scales of the Managerial Philosophies Scale and the Management Motive Index for those selected into the leadership ranks (EMTP, Phase II) and the educational officers who participated in the EMTP, Phase I as observer/raters.

Hypothesis V: There is no significant difference between the demographic variables and the mean scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index of leadership and personality traits for those not selected into the leadership ranks (EMTP, Phase II) and the educational officers who participated as observer/raters.

Hypothesis VI: There is no significant difference between the mean scores on the sub-scales of FIRO-B for those selected into the leadership ranks (EMTP, Phase II) and the observer/raters.

Hypothesis VII: There is no significant difference between the mean scores on the sub-scales of FIRO-B for a sample of non-selectees and the observer/raters.

Ancillary Research Questions

The basic hypotheses addressed similarities or dissimilarities between the selectees, non-selectees, and educational officers on demographic, criteria, personality, and role expectation measures. To further amplify and search for relationships among various measures, a series of three ancillary questions were posed. They are as follows:
1. Among the four EMTP, Phase I criteria used to admit candidates into Phase II, were there one or more criteria that did not effectively predict between the selectees or non-selectees?

2. How well did the scores of the candidates on the EMTP criteria properly classify them as selectees or non-selectees?

3. Will knowledge of scores on selected inventories of personality and role expectation materially increase the accuracy of classification of candidates as selectees or non-selectees?

Limitations of the Study

1. The present study was limited to candidates who participated in the program during the years 1976, 1977, and 1978. Educational officers who participated in the study were those who, in one way or another, participated in the years 1976, 1977, and 1978.

2. Because the 1976 EMTP Phase I candidates did not complete the Managerial Philosophies Scale and the Management of Motive Index inventories, their comparison with other groups were limited to the demographic, EMTP, Phase I, and FIRO-B measures.

3. There might be a tendency of those who were surveyed or inventoried to make choices on the inventories that would make them look better than they felt or thought they were. The risk of some inaccuracies entering into the measure-
ment data are present in any method or system which attempts to locate and identify leadership potential.

4. The analysis of role expectation and personality sub-scales was limited to the terminology used by the authors of the particular tests.

5. The Privacy Act precluded the researcher from personally analyzing all the data on all EMTP, Phase I candidates. Only data found on Data Collection Sheet, in Appendix A, was given to the researcher.

Summary

Chapter I presented an overview of the Hawaii State educational system, the background of the study, and the purposes of this study. The purposes were: (1) to compare the similarities and dissimilarities on personality and role expectation among the EMTP, Phase I selectees, non-selectees, and administrators already on the job; (2) to compare among these same groups the similarities and dissimilarities on select demographic data; and, finally, (3) to compare the similarities or dissimilarities between the EMTP, Phase I selectees and non-selectees on the Hawaii State Department of Education Educational Management Training Program selection and evaluation measures. Chapter I also presented the problem to be investigated, the hypotheses of this study, ancillary research questions, and the limitations of the study.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Chapter II contains an overview of the social systems model as expounded by Getzels and Guba. Specifically it deals with the proposition that role is a primary and significant force in an institution which generates a set or sets of role expectations. A second section of the literature discusses bureaucracy and how its elements interrelate with the nomothetic dimensions of the social systems model. The third section describes aspects of the search for leadership, including both the efforts to isolate the salient elements that characterize the concept and the empirical studies about various attempts to link theory and practice. The final section discusses the use of assessment centers in identifying and training leadership potential, and data on inventories used in the study.

An Overview of the Social Systems Model

The theoretic framework for this study was discussed in Chapter I (see pages 15 to 21). In this portion of the review of the literature a case is made for the need for theory to guide empirical research and to form a basis from which concepts or constructs might be viewed. As any
field knowledge consists of concepts, theories, and generalizations, with each aspect dependent upon the one preceding it, the social systems model which deals with abstractions or explanations may be valued by using it to test hypotheses which may arise from it.\textsuperscript{35} Organizational theory is concerned with finding those ideas or concepts, generalizations, or principles that explain the structure and dynamics of organizational life.\textsuperscript{36} Also, organizational theory is concerned with providing an explanatory basis or framework for unrelated data or information.\textsuperscript{37} The Social Systems Model of Getzels and Guba\textsuperscript{38} provided for that theory from which the hypotheses were viewed. While the hypotheses served as a bridge between theory and research, they specifically served to provide an avenue through which theory can be tested against objective reality.\textsuperscript{38} The results of research expect to provide data for the acceptance or rejection, or even refinement of hypotheses which grew from theory.\textsuperscript{39}

In a social system, such as that described by Hoy and Miskel, there is a system bounded by activities and elements in mutual interaction. Together they constitute a single social entity which has properties and purposes greater than the activities and elements.\textsuperscript{40} In describing the social system, Olsen, (see Figure 2) stated that the school organization was a model which possessed subunits, elements, and subsystems; while each was interrelated, the
school organization possessed a synergy in which the whole became greater than the sum of its subelements.  

ENVIRONMENT

THE SCHOOL BUILDING

Mutually Interacting Components

1. Elements-Sub-systems
   Formal School Structure
   Administration & Policy
   Classrooms
   Custodial
   Informal Groups
   Individuals
   Administrators
   Teachers
   Other Employees
   Students

2. Activities - Behaviors
   Administering
   Teaching
   Maintaining
   Learning
   Creating
   Socializing

Figure 2

A definition of the Social System Using the School Organization
Social systems are essentially sets of sanction generating units, coercive in nature, and with behavioral norms which are elicited or enforced with rewards and punishment. That is, individual conformity to expected behaviors are looked on with favor, while deviations from the norm are tolerated or looked upon with disfavor. Informal and formal means are used to bear upon individuals so as they conform to expected behavioral norms. The means include promotion, non-promotion, demotion, transfer, sarcasm, ostracism, suspension, and even termination.\(^{43}\)

In the Getzels-Guba Model, the social system is bounded by elements in mutual reaction or interaction with each other. Together they constitute a single social entity.\(^{44}\) Roles which are promulgated by institutions are purposive, externally structured, normative, and are sanctioned by the institution. They represent offices or positions and are normally defined in terms of role expectations. These expectations are single or set of behaviors, acts, and obligations that should be expected and be forthcoming from the role incumbent.\(^{45}\) Secondly, personality, which is the dynamic organization within an individual, is represented by those need dispositions that determine his response or reactions to the environment or the expectations of the environment. The need dispositions are seen as his tendency to be oriented to and act to experience in certain manners and to expect certain reactions or results from his
actions. In prioritizing the importance of the subunits or elements in the Social Systems Model, Getzels and Guba identified the most important subunit of the system as the role element, with personality and need dispositions being of lesser importance. Being that role is a subunit of the nomothetic dimension, it is in the formal organization or the bureaucratic structure. In retrospect, with Olsen categorizing the school organization as a model of a social system, it can be stated that roles and role expectations can and do possess the highest priority in the Getzels-Guba Social Systems Model.

In the influencing of behavior, Abbott stated that formal school organization and the informal groups that make up the organization's attempt to influence behavior. Figure 3 is an adaptation of the Getzels-Guba Social Systems Model. It attempts to show individuals the manner in which their behavior is seen by the school's bureaucratic and informal groups. The feedback loop in Figure 3 is an expression of pressure or influence of the formal and informal organization. As such, formal school organizations provide an official position to which individuals respond, and a set of expected role performance and behavior, if performance or behavior is valued by the school organization, confirmation of the behavior or rewards are used.
An Abbott Adaptation of the Getzels-Guba Social Systems Model

Figure 3

An Abbott Adaptation of the Getzels-Guba Social Systems Model

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An Overview of Bureaucracy

In developing an understanding and explanation of the military, government, and industrial organization during the early part of this century, Max Weber advanced the theory of bureaucracy. He stated that the administration of the organization or institution was run by "role" expectations from its members. Each member of the organization was expected to perform according to his job expectations or description. Job tasks and responsibilities were clearly written and precisely spelled out in a rational and unbiased manner for each role within the organization; subordinates needed to merely carry out the functions and tasks of their jobs and the administrator's major role would be to assure the subordinates performed their tasks and roles as prescribed. Weber felt that the organization could be efficiently run by an established set of regulations, by-laws, rules, and policies. Robert Presthus in The Organization Society listed five characteristics of the bureaucratic society. He stated that a bureaucracy was (1) encompassed by fixed and jurisdictional areas and where members were regularly ordered by regulation, by-laws, rules, and policies; (2) encompassed by the principles of hierarchy and levels of authority; (3) one where administration is based on written rules, policies, descriptions, and at times, procedures; (4) run by trained officials, and, (5) one where the administration is planned according to the established guidelines as set forth
by official regulations, by-laws, policies, and roles.\textsuperscript{55,56}

Bureaucracy as an administrative system has been commonly used during this century, especially by large industrial organizations and the military establishments. Leaders adopting this bureaucratic approach have within easy grasp role descriptions and expectations of each member of the organization. The leaders' role would be to assure the prescribed functions and tasks were performed.

Educational institutions, too, are aligned with the governmental, industrial, and military organizations in many of the aspects or subelements of bureaucracy. The value orientation and behavior norms\textsuperscript{57} expected from the employees are reflective of that found in the bureaucratic structures. The school organizations today generally are highly developed bureaucracies, as they exhibit many of the mannerisms and traits found in the organizations with the traditional Weberian model.\textsuperscript{58} This may help to explain why the schools, when seen as a bureaucracy, are predictable relative to certain types of behavior.

In retrospect, the literature on social systems and bureaucratic structure, indicates that the organization or group has significant influence on individual behavior. The research focused on attempts to ascertain the leadership characteristics which are most valued, and the importance of the role behaviors in the formal organization.
The Identification and Selection of Leaders

The search for literature which dealt with the recruitment and selection of educational administrators led to a broad spectrum of the managerial world. Literature in the industrial segment of society provided much information and insight to administrative recruitment and selection which may be applicable to understanding the educational society.

The terms "executive, supervisor, manager, leader, and administrator" are used throughout the literature, both in the educational realm and elsewhere. While there exist some real differences among them, both in scope and responsibilities, all are definitions of a person who is at or near the top of some organizational entity and who is responsible for the continuity of the organization and its operations.

Identifying Leadership Through Personality Dimensions

The literature deals with both leadership and personality factors, often one with the other, and, at times, one exclusive of the other. Personality traits are often read as leadership traits, and visa-versa. Traits such as aggressiveness, firmness, and sociability may, with ease, be discussed as either personality or as leadership traits. Too, leadership and personality are both constructs, in that they possess intangible qualities and are convenient
terms for descriptive purposes. Although leadership does not entail all qualities that may be found in personality, there is some suggestion in the literature that leadership has certain personal qualities that make for leading.

The review of the literature has shown an interest in two dimensions of personality and leadership traits. The first is a traditional approach whereby researchers pursue leadership through the identification of traits which they suspect as important in a leader. The second, a newer dimension, is the pursuit of leadership understanding through the leader's behavioral dimension. The functions of the leader, often stated in behavioral terms, are measured and patterns of his leadership and even personality makeup are analyzed. Both the traditional and behavioral dimensions will be presented in the review of the literature, at times one with the other, as they both exist in our current search for leadership potential. The researcher feels both are important entities in the study of leadership and both are interrelated and complimentary, one to the other.

While the early identification of leadership potential is frequently accepted as the initial task in developing an effective managerial development program, the information needed to make that early identification should be fully expressed, understood, and supported. Additionally, members need to understand that techniques and
methods utilized for identifying leadership potential have not been well-developed nor generally agreed upon.\textsuperscript{65,66} There are still many crucial questions about the role expectations and requirements of the leader.\textsuperscript{67} Organizations such as the Ford Foundation have funded research in this area.\textsuperscript{68} However, whatever research may bring to light, it can be generally agreed upon that it is unrealistic to find the perfect leader, one who is understanding in every area of personal qualities and achievement.\textsuperscript{69}

Members climbing the managerial ladder need to realize that the organization normally utilizes two sources\textsuperscript{70} to gather information about them. One of the sources is the judgments and observations made by others. The other, an internal source, is the information provided by the member himself. In reference to the information sought by the organization, Myers\textsuperscript{71} stated that in order to make correct and solid measurement or appraisal of the member, it was necessary to know the characteristics he brought to the job. Myers further stated that the characteristics sought by the organization were commitment, judgment, motivation, creativeness, initiative, drive, stability, and decisiveness. In a research project designed to identify management potential, Myers\textsuperscript{72} reported that test results on factors such as management attitude and temperament were higher for successful managers; and that characteristics such as sociability, objectivity, emotional
stability, and aggressiveness have had some relationship to managerial success. In his comments on testing, Myers cautioned organizations from gathering information which could be construed as too personal and for which the organization has no concern. This was an obvious warning on the subject of invasion of privacy.

Cleeton and Mason in 1946 listed twenty-five different qualities of the executive, among which were found leadership and personality traits; they also listed fourteen tests that were available for measuring these traits. They further provided a list of nineteen tests of executive ability which included personality measures. Cleeton and Mason's writing revealed the very wide range of factors which scholars in the 1940's believed suitable for identifying the executive.

In the Organizational Behavior in Schools, Owen stated that it was generally believed that characteristics which made individuals qualified to exercise leadership were intelligence, imagination, perseverance, and emotional stability. The capacity to lead was then dependent upon the presence of these characteristics in the individual.

Cattell, especially noted for his work on personality factors, sought to isolate a manageable number of personality traits relative to determining administrative potential. This resulted in the Personality Factor Questionnaire. In one research project Cattell and Stice
reported that non-leaders scored significantly different from leaders on the questionnaire. Some of the traits were emotional maturity, dominance, character integration, cyclothymia, and nervous tension.

Dooher and Marting\textsuperscript{77} reported that organizations in our industrial society have attempted to be systematic in their search for executive talent. In some of America's largest industrial organizations, management has conducted the following steps for identifying and developing managerial positions: (1) designed a program and its organization, (2) surveyed the staff and the union on the program, (3) made specifications for the leadership positions, to include leadership and personality traits (typical traits mentioned were courage, loyalty, liking for people, understanding of human nature, emotional stability, pleasing personality, keen perception, and ability to make quick and sound decision), and (4) set up procedures and organization for the preliminary selection of candidates. In the program all potential candidates faced a battery of tests.

In a special report made to the Harvard School of Business Administration, Nichols expressed the point of view that executive talent might possibly be an intangible quality,\textsuperscript{78} but one which needed to be made tangible. However intangible the quality might be, the report stated that there were eight universals common to the successful executive. They were position performance, drive, intellectual ability,
leadership, administration, initiative, motivation, and creativeness. These same universals were also found in Edith Sands' book, *How to Select Executive Personnel*. And while the report made to the Harvard School of Business Administration and Sands did not necessarily equate the universals to the characteristics of educational leadership, there appeared some commonalities whereby the characteristics were desirable. In the Harvard report, industrial psychologists were reported to have listed for exploration five major "man criteria." Three of the five were the potential leader's personality, his understanding and relationships to other people, and his ability to think in management terms.

In discussing the success determinants, Higginson and Quick regarded seven characteristics that, in addition to conditioning females to lesser roles in our society, were ones which were not indicative of members who aspired for higher levels of success, especially in the executive category. These characteristics were passivity, dependency, diffidence, submissiveness, docility, inferiority, and non-competitiveness. They continued by stating that females who succeeded had the characteristics of risk-taking, candor, high self-esteem, ambition, competitiveness, and high energy level. Woods, whose profile of a successful woman in management included the list of characteristics above, also included the characteristics of realism,
aggressiveness, and self-confidence. A look at the current Hawaii State Department of Education Education Management Training Program document revealed many of these traits as being desirable in the potential leader. These traits are intelligence, individuality, motivation, creativity, independence, and innovation.

Poteet, in discussing concepts of group dynamics, mentioned an evaluation study by Wiles and Graham that expressed the opinion that democratic leadership situations resulted in higher productivity when compared to authoritarian and laissez-faire situations. Too, they mentioned that authoritarian leadership brought forth more productivity than laissez-faire leadership.

In a criticism over the selection of leadership in the educational realm, Stout stated that an obvious characteristic among educational administrators was that they looked very much alike in a number of attributes and functions. He stated this homogeneity among the members could be explained by the members themselves as they were instrumental in exerting significant control over the recruitment of potential leaders. Stout cited this statement from both an empiric base and from the findings of researchers who have studied the extreme homogeneity among administrators.

Myers raised the question of whether the use of tests for selection purposes might inevitably result in the
selection of managerial personnel who will look or think alike, and consequently bring about the continuance of conformity in management. This does not mean that while on the surface there might appear to be conformity, internally there might exist a wider range of varying abilities and personal characteristics. However, this does not explain away the traditional practice of rewarding conformity, especially that of selecting potential leaders whose behavior was similar to the organizational leadership.88

Stryker89 dealt with traits that have been commonly ascribed to the more successful leaders in industrial management. These traits were good judgment, cooperation, initiative - ambition drive, decisiveness, emotional stability, getting along with people, dependability, conformity, and fairness. He further remarked that while one could use traits to describe the leaders, leadership and personality trait approaches have failed to locate executive talent. Stryker did not expect the understanding of personality traits to be made into a common, simplified, or generalized definition. Rather, the complexity of personal makeup has been too broad, in light of current research, for anyone to make lasting or definitive statements on how it can be utilized for valid predictions. Still, in light of the above, England90 offered the conclusion that personality and leadership measures were both measurable and important to measure. He remarked that, while there have been no
definite answers on how individual values developed and changed as one experienced organizational activity, the mix of values the members has varied from one organization to the other. He further remarked that research needed to seek the optimal mix members should have while they were in different and varying institutions.

Identifying Leadership Through Behavioral Dimension

A symposium conducted by the Division of Research, Graduate School of Business, Harvard University, suggested that to provide for better selection of potential leaders, researchers needed to begin with studies on jobs rather than studies on leaders. The suggestions have been supported by the fact that selection of individuals for advancement have been heavily predicated upon their leadership characteristics. In this regard, the use of test measures and descriptive traits of leadership have served as a diagnostic tool. When observing an individual for leadership qualities, one should be mindful that a systematic search for leadership talent should have facets that include the program analyses inputs leaders bring into situations, the processes they use in their leadership positions, and the results or outputs they are able to bring about. Such a systematic view will provide for an assessment of ability that will be effective in reaching the goals and objectives of the institution.
Drucker\textsuperscript{95} stated, in his description of leadership talent, that studies of leadership should bear on performance results. He specified that leadership talent can be viewed in the framework of how one defines and sets objectives, establishes their priorities, achieves outcomes, and then uses outcome data to further goals or objectives and to evaluate one's performance.

From relying heavily on lists of traits or descriptive terms to identify leadership personnel, Wochner and Lynch\textsuperscript{96} reported a growing trend among behavioral scientists to use behavioral functions and patterns for the identification and evaluation of leadership personnel. Morphet and Schutz\textsuperscript{97} had already begun in the early 1960's to develop measures for behavioral patterns which could aid in identifying potential leadership. Using what they termed a Fundamental Interpersonal Relations Orientation Theory, which was an interrelationship of both personal characteristics and personal interactions, Morphet and Schutz used test measures, called \textit{FIRO-B}, to study administrative behavior. They felt that if they could understand well the measures brought out in the test, they could make them predictively useful.\textsuperscript{98}

Attempts to describe leadership and personality traits in behavioral terms were done by Halpin and Croft.\textsuperscript{99} Their \textit{Organizational Climate Description Questionnaire} (OCDQ) has become a media through which one might measure the climate of the organization in terms of leadership and
personality behavior. This questionnaire reflected a movement from the use of traits to describe the leader.

In similar fashion George Stern and Carl Steinhoff have developed an approach to the measurement and description of organizational climate. They developed the Organizational Climate Index (OCI). The climate of the organization was matched both to the leader's traits and to the behavioral functions and pattern he exhibited. Hemphill and Coons development of the Leadership Behavior Description Questionnaire (LBDQ), which brought out descriptive data on how the leader behaved with his staff, i.e., how he structured the organizational situation and his consideration towards his subordinates, has tended to isolate the description into two categories: the behavioral dimensions of leadership and personality.

It should be noted that the literature has often reported the search for leadership personnel through tests or test batteries. With varying degree of success they have provided information on individuals and groups. It should also be noted that predictions from test results are better used with larger population or groups than with individual members of the group. And, while the literature has much to say on leadership and personality traits, behavioral dimensions regarding leadership, and criteria and tests used to identify and select leadership potential, there currently exists a need for researchers to
validate the identification and selection processes.

Interestingly, while a search continues for leadership and personality traits and behavioral functions and patterns of leadership, all of which may aid the organization in the identification and selection of leadership personnel, there is a growing movement which emphasizes the need to develop quantitative analysis skills. Bruno and Fox\textsuperscript{105} reported that the current view of the leader as a person skilled in social dynamics and being a humanistic team leader tends to be changing. They reported a shift in the 1970's in the direction of identifying and developing leaders who were proficient in quantitative analysis. During this same period, Beiber and Peterson\textsuperscript{106} have raised the issue of education officers' skills. Like Bruno and Fox, they stated that education is at the threshold of another era: the era of management for results. They predicted that the near future will emphasize quantitative analysis as the skill most desirable and necessary in educational leaders. However, they still supported the contention that leaders who possessed a good mix of strong leadership and personality traits would be likely to succeed.

**Identifying Leadership Through the Assessment Center**

A movement that has gained a measure of popularity during the eighties is the use of assessment centers. In
the search for leadership talent, Berkeley Rice reported that some 2,000 of America's largest organizations were utilizing assessment centers to identify and help select potential leadership personnel. While the centers differed in their approaches in assessing the potential leader, they commonly included the behavioral aspect of the members whom they considered. Rice reported that American Airlines, whose assessment center was typical of the large number of centers, looked for participants' expressions of leadership, initiative, decisiveness, judgment, independence, delegation, communication, problem analysis, risk-taking, stress, tolerance, assertiveness, creativity, and sensitivity. Members who ran the centers more often than not had some training in behavioral psychology.

A typical technique of assessment centers has been to run the members through test batteries, interviews, and in-basket exercises. Of particular interest to those who ran the programs were the members' reactions to problem-solving and stress.

In a National Association of Secondary School Principals pilot assessment center, Jeswald reported the following traits or behavioral dimensions the assessor looked for in aspiring educational leaders: problem analysis, judgment, organization ability, decisiveness, leadership, sensitivity, range of interests, personal motivation, educational values, stress, tolerance, oral communication,
and written communication.

While assessment centers do help provide more data on the participants, including personality and leadership measurements, Rice\textsuperscript{112} remarked that the validity of the assessments reflected in better light only the traits and experiences of the participants. He reported that there has been insufficient research or testimony to substantiate the success of the centers' programs.

In specific reference to the educational field, Brandwie, Johnson, and Trump\textsuperscript{113} recommended that programs which sought to prepare and develop secondary school administrators should have flexibility, a definite design, logic, and integrity. Further their recommendations were substantiated by the need in the field to develop a general theory to guide the efforts of leadership development. In the absence of a theory, experimentation or program development may gravitate to confusion and uncertainty.\textsuperscript{114} And, while the recommendations made were for the secondary schools, one cannot help but feel that they also fit the elementary schools, and even industry in general.

**Inventories of the Study**

Three personality and leadership inventories were used in this study: the Management of Motive Index (MMI) by Jay Hall and Martha Williams,\textsuperscript{115} the Managerial Philosophies Scale (MPS) by Jacob Jacoby and James R. Terborg,\textsuperscript{116} and the Fundamental Interpersonal Relations Orientation -
The Management of Motive Index (MMI), a sixty item inventory, was based principally on Abraham Maslow's Need Hierarchy, beginning at the lower level with basic needs and ending at the upper level with self actualization. Figure 4 below depicts Maslow's Need Hierarchy.

Figure 4
Maslow's Need Hierarchy
Basic needs, safety, and belonging reflected hygienic factors, while ego status and self-actualization reflected motivator factors. The inventory is a self-scoring assessment tool, yielding five scores which revealed the emphasis the member taking the inventory placed on each of Maslow's five needs system in managing other people. The lower the member placed on the scale, the lower was his self-esteem and the more he expected to receive help from others. The higher he placed on the scale indicated the more self-esteem he possessed, the more control over the situation he would have, and the more he gave to others. The test provided a profile summary bar graph with which members would plot each of the sub-scale areas of the inventory. An average range for each sub-scale, generated from the authors' normative sample, provides for an interpretive model with which members could compare their measures. (See Appendix 2 for the Profile Summary bar graph.) While the test was built on a normative sample of 1954 members, it has undergone some validity studies during the last ten years. Assuredly, more research on this relatively new inventory should reveal more statistical data necessary to validate this instrument.

The Managerial Philosophies Scale (MPS), a thirty-six item inventory by Jacob Jacoby and James R. Terborg, is another relatively new instrument. It is an inventory constructed to assess the inventory taker's assumptions and
practices about the philosophical premises of Douglas McGregor's Theory X and Y. Theory X reflected a reductive style of management beliefs and Theory Y reflected a developmental management belief. Listed below are premises of Theory X:

1. The average person dislikes work and will avoid work if he can.
2. Most people need to be coerced, monitored, and directed to work toward the organization's goals. Punishment needs to be used to coerce them towards the goals.
3. The average person prefers to be guided or directed, prefers security, and avoids responsibility.

For Theory Y, the premises are:

1. Physical and mental work are natural entities and are satisfying activities.
2. When committed towards an organization's goal, people will exercise self-direction and control.
3. Ego satisfaction and self-actualization are the highest rewards people value.
4. People can learn to accept and seek responsibility.
5. Commonly found among people are creativity, ingenuity, and imagination.

The MPS assessed the member's assumptions and working theories about the nature of other's activities and work he coordinates. The test provides a philosophy bar graph with which a member would plot his Theory X and
Theory Y scores. An average range was provided for each sub-scale which with the member could interpret his scores.\textsuperscript{134} (See Appendix 3 for the Philosophy Bar Graph.) While 1189 managers provided for the normative data for this inventory,\textsuperscript{135,136} additional research should reveal the additional statistical data necessary to validate this instrument.

The Fundamental Interpersonal Relations Orientation - Behavior (FIRO-B), a fifty-four item inventory constructed by Will Schutz, is a questionnaire designed to explore the typical way a member interacts with people.\textsuperscript{137,138} The questionnaire inventories the predisposition and the effectiveness of the inventory taker as he interacts with others. The inventory is based on the premise that much of the individual's interpersonal behavior is structured or determined by his needs in interpersonal areas. These areas are inclusion, control, and affection.\textsuperscript{139} The first, inclusion, refers to the interactions or associations between people, whether one is being included or excluded in associations. The second, control, refers to the decision-making interactions between people; specifically, it refers to the areas of authority, influence, and power. Control varies from the need to have authority over others to the need to be controlled. And, the third, affection, refers to the personal emotional feeling between two people.\textsuperscript{140}
The FIRO-B questionnaire purports to measure expressed needs in inclusion, control, and affection. The expressed needs are expressions which reflect the behavior or feelings an individual initiates toward others. FIRO-B also purports to measure wanted needs in these three areas. Wanted needs are that which refer to the behavior or feelings the individual wants others to demonstrate toward him. Results of the questionnaire are used to show the manner with which the individual interacts with people. The FIRO-B inventory provides for no right nor wrong answer, as a member may score each sub-scale within a range of one to nine, with one being low and nine being high. Interpretation of the scores allows a member to see how he interrelates with others. (See Appendix 4 for FIRO-B scales and interpretation of summary scores.)

FIRO-B was initially developed on about one thousand subjects. While initially its normative sample group included mainly educational administrators, it later included architects, psychology majors, nurses, teachers, salesmen, graduate students, university and high school students. Its measure of internal consistency is a reproductibility mean score of .94 for each sub-scale. Its coefficient of stability for each sub-scale when used during a study ranged from .71 to .82. As much research or study has been done under the umbrella of the FIRO theory, FIRO-B has been studied enough to be
recommended for utilization in interpersonal needs research.

Summary

This chapter began with an overview of the Social Systems Model, with particular attention to the elements in the nomothetic dimension of role and role expectation. A theory of bureaucracy was presented, with the bureaucratic organization of educational institutions identified and contrasted to the military, industrial, and other governmental organizations. The next section of Chapter II dealt with the literature focusing on the research on leadership and presented data on the descriptive characteristics or traits of leaders. The movement toward job studies and qualitative skills of leaders and organizational climate were broached and a sub-section included the current practice of utilizing assessment centers to identify and develop leadership potential. The chapter concludes with an overview of the three personality and leadership inventories used in the study, noting that the first two instruments, the Management of Motive Index, and the Managerial Philosophies Scale, were relatively new inventories, and the FIRO-B inventory being relatively well-validated as a research instrument.
CHAPTER III

METHODOLOGY

Introduction

This chapter contains the description of the population and the number of subjects in the sample. It also includes a list of the evaluation measures which were used to determine which candidates in the EMTP, Phase I Program were to be selected for additional training. A description of the demographic data which was used to test the assumption of one of the hypotheses was presented. Chapter III also includes a description of the personality and role expectation measures used in the EMTP, Phase I Program, the variables studied in this research, the data collection, and the process used to administer the personality and role expectation inventories. Finally, this chapter contains a description of the statistical procedures and analysis that were employed to test the hypotheses and ancillary questions.

Description of the Population and Sample

The Population

The population to which the study sought to generalize was the group of volunteer candidates who were either successful or unsuccessful in their efforts to be admitted
into the educational leadership ranks by virtue of being selected for advancement into EMTP, Phase II during the years 1976-1977-1978. Since the same selection program was still extant in 1981-1982 and the same techniques and procedures for selection were being employed, it is possible to generalize to all candidates who have attempted to become educational officers in the State of Hawaii by virtue of their attempt to be selected into the EMTP, Phase II Program. A subsidiary population of the study were the educational officers who have served as observer/raters in the EMTP, Phase I Program.

**The Sample**

The sample consisted of three groups: (1) the candidates who were successful in being selected into the leadership ranks; (2) candidates who were not selected; (3) a sample of educational officers who served as observer/raters in the EMTP, Phase I Program.

**The Selectees**

The EMTP, Phase II selectees were those who successfully completed the EMTP, Phase I Program during one of the sessions in 1976, 1977, or 1978 and who were advanced into the EMTP, Phase II. They were, for the most part, Hawaii State Department of Education public school teachers, most of whom had five or more years of successful teaching experiences and possessed a Hawaii State Professional
Teaching Certificate. Their academic degrees ranged from Bachelors' in Education, Arts, or Science to Masters' of Science, Arts, and Education. Members of this group had taught in either elementary, intermediate, or high schools throughout the State. Some came from the Hawaii State Department of Education District offices, while others came from the Hawaii State Department of Education State offices.

All had experience with the Department of Education system as teachers, counselors, educational resource personnel within the department, or as an educational specialist at the District or State levels. A few were, or had been, acting vice-principals at the school level. Coursework in Educational Administration at the local university or other institutions of higher education had been taken in varying amounts by the candidates. From the EMTP, Phase I sessions in 1976 twenty-one from a total of one hundred and eleven candidates were selected into Phase II, seventeen from a total of eighty-six during 1977, and thirteen from a total of seventy-nine candidates in 1978. A total of fifty-one Phase II members were the sample of selectees.

The Non-Selectees

The non-selectees were candidates who had participated in one of the EMTP, Phase I sessions during the 1976, 1977, and 1978 years and were not selected to join the leadership group. The numbers in this group were ninety in
1976, sixty-nine in 1977, and sixty-six in 1978. Their employment history and coursework were the same as those described above for the selectees.

A group of twenty-four non-selectees who came from the 1976-1978 population of non-selectees and who opted or volunteered to attend an additional two-week Educational Management Training Program during the summer of 1979 were used as a sample group of non-selectees. While the additional two-week program was opened to all former non-selectees, only this group of twenty-four chose to participate. In a certain sense these candidates represent a non random sample, since each person had volunteered to go through an EMTP Program a second time. However, they exhibited the initial characteristics of the other non-selected group in that they were not chosen during their initial attempt to enter the leadership group. Only one of the twenty-four who volunteered the second time was subsequently selected for Phase II of the program.

The Observer/Raters Group

Forty-four educational officers comprised the sample of observer/raters. This sample was chosen on a non-random basis by personnel in the Office of Personnel Services. They participated in the EMTP, Phase I sessions during the years 1976, 1977 and 1978. They held positions as principals,
educational specialists, educational directors, assistant district superintendent, district superintendent, and state assistant superintendent. Most from this group came from the various major islands of Hawaii, Oahu, Maui, and Kauai and were considered to be a typical cross-section of the educational officers of the Hawaii State Department of Education. Members from this group possessed academic degrees which ranged from a Bachelor's degree to a doctorate. Most, if not all, of this group have had experience in the classroom, or like the selectees or non-selectees, have held positions as counselors, resource members, or as educational specialists. All have had more than five years in the Department of Education, and additionally, each possessed the Hawaii State Department of Education Administrator's Certificate. The majority of observer/raters observed several times.

**Demographic Data**

In addition to data described above which were gathered for this study, three pieces of demographic information were collected for all the individuals in the sample; they were:

1. Age
2. Sex
3. Number of years service in the Department of Education.
Candidates who volunteered for the two-week EMTP, Phase I Program underwent numerous classwork and evaluation sessions. They were graded on homework, quizzes, a mid-term examination, a final examination, were observed and rated by educational officers, and were given daily peer evaluation on their conduct and performance by other members. From these sessions, scores were collated and categorized into four categories:

1. **Academic Coursework**: This included all the homework assignments, quizzes, and examinations. Grades on the assignments and scores on quizzes and examinations were totalled and a composite score was given to each participant.

2. **Interview Rating**: Each candidate was required to meet with a group of educational administrators for a formal interview. During the interview session the candidate responded to questions such as: (1) why he/she wished to become an educational officer, (2) how he/she would handle specific educational concerns or problems, and (3) how he/she expected to contribute to the educational system. Each candidate was rated by each rater as he/she was being interviewed. The individual ratings were discussed by the group after the candidate had completed the interview and a composite score was assigned to the person. The interviews were scheduled
for a one-half hour block of time, and all interviews were held during the early evening hours during the two-week EMTP, Phase I Program.

3. Observation Rating: A rating was given to each participant as he or she participated in the two-week session. The procedures for rating were discussed with the observer/raters, each of whom was a practicing educational administrator, in an attempt to obtain consistency among the raters. The observer/raters then observed each candidate during the various activities in which he or she participated during the two-week session. Each participant was observed on several process variables such as how he/she fielded or handled questions and concerns during the problem-solving activities or sessions, how he/she made reports to large or small groups, and how he/she led or participated in group sessions. Ratings were made on personal variables, including the behavior the participant exhibited, how he/she thought through the situations, and how he/she handled himself/herself throughout the activities. Generally, each participant was observed for an entire day by several different observer/raters. The ratings for each participant were collected and collated; an average score was computed and given to each participant.

4. Peer Observation Rating: A rating was made on each candidate by others in his/her group as he or she participated in the two-week session. The procedures for rating one
another were discussed with the participants prior to the rating periods or at the beginning of the EMTP, Phase I Program. Each candidate observed and was observed by the people in his/her group during the various activities of the program. Peers were observed as to how they fielded or handled questions and concerns during the problem-solving activities or sessions, how they made reports to small or large groups, and how they led or participated in group sessions. Like the observer/raters, the ratings given to each peer were given for the behavior the participant exhibited, how he thought through the situations, and how he handled himself throughout the activities. Each participant, by the end of the two-week period, was observed or given a peer rating by most of the candidates. The ratings were collected, collated, and an average peer evaluation rating was given to each participant.

At the conclusion of the EMTP, Phase I, the raw scores which the candidates received in each of the four areas, i.e., academic coursework, interview, observation, and peer evaluation, were transformed into a quintile scale (from 1 to 5) and the scores were summed. The candidates whose composite score was in the top quintile were eligible to be selected into the EMTP, Phase II Program. Members in this quintile were normally made a part of the educational leadership group.
Personality and Role Expectation Measures

A number of personality and role expectation measures were used either as part of the Educational Management Training Program or specifically for this study. Two, the Managerial Philosophies Scale and the Management of Motive Index, were administered at the beginning of each session of the EMTP, Phase I Program. The Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) measure was administered by the researcher to the members who participated in the EMTP, Phase I Program and to the observer/raters of this study. The completion of the FIRO-B inventory itself was carried out in the privacy of the home or office of each EMTP participant and observer/rater of this study. The FIRO-B provided ten sub-scales on personality traits while the other two inventories added seven personality and role expectation measures.

While the Managerial Philosophies Scale and the Management of Motive Index instruments were administered as a part of the EMTP, Phase I Program, its use as an evaluative or selection tool by the Department of Education has not been fully explored. The researcher included these two inventories in the study, as the Management of Motive Index revealed measures on the personality make-up of the members and the Managerial Philosophies Scale provided measures which indicated the philosophic leanings of the members, especially whether there were indicators of their being in
the nomothetic dimension. The FIRO-B, an instrument introduced by the researcher, was used as a method to determine the interpersonal traits of the candidates. The use of the three instruments was expected to reveal potential differences in personality and role expectation dimensions among the three groups in the study.

**Design of the Study**

The study employed a co-relational design. Each subject in the groups titled selected and non-selected completed the three inventories, i.e., Managerial Philosophies Scale, Management of Motive Index, and the FIRO-B, as did the sample of observer/raters. Demographic data were either provided by the subjects or the Office of Personnel Services, Department of Education. For all the selectees and non-selectees, the Department of Education provided the composite scores on each of the EMTP, Phase I Criterion; they include the academic, interview, observation, and peer evaluation scores.

The three independent variables examined were selectee, non-selectee, and observer/raters. To test various aspects of leadership potential among the groups, a total of twenty-four dependent variables were used. They are listed in Table 1. The first three are demographic data, the next four are scores on performance in EMTP, Phase I, and the final seventeen constitute sub-scales of the management inventory instruments used in the study.
Table 1
Dependent Variables Used in the Study

1. Age
2. Sex
3. Number of years the member has served in the Hawaii State Department of Education
4. EMTP, Phase I Academic Coursework
5. EMTP, Phase I Interview
6. EMTP, Phase I Observation/Rating
7. EMTP, Phase I Peer Evaluation

Managerial Philosophies Scale:
8. Theory X Philosophy
9. Theory Y Philosophy

Management of Motive Index:
10. Basic Creature Comfort
11. Safety and Order
12. Belonging and Affiliation
13. Ego Status
14. Actualization and Self-Expression

FIRO-B:

15. The desire one has for contact with others, regardless who initiates it (SUMI).
Table 1 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tr>
<td>16.</td>
<td>The desire for structure or a preference for giving or taking orders (SUMC).</td>
</tr>
<tr>
<td>17.</td>
<td>The desire for an exchange of affection and warmth (SUMA).</td>
</tr>
<tr>
<td>18.</td>
<td>The desire to initiate behavior towards others (SUME).</td>
</tr>
<tr>
<td>19.</td>
<td>The desire to have others initiate behavior towards you (SUMW).</td>
</tr>
<tr>
<td>20.</td>
<td>The desire for interaction with people in all areas (SUM).</td>
</tr>
<tr>
<td>21.</td>
<td>Whether one rather be the invitor or the guest (DIFFI).</td>
</tr>
<tr>
<td>22.</td>
<td>Whether one rather be the one giving orders to others; or conversely, whether one rather take orders (DIFFC).</td>
</tr>
<tr>
<td>23.</td>
<td>Whether one rather initiate affection over receiving it (DIFFA).</td>
</tr>
<tr>
<td>24.</td>
<td>Whether one has a preference for taking the initiative in human relationships (DIFF).</td>
</tr>
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</table>

The twenty-four dependent variables measures or data were used to test the hypotheses in Chapter One and to provide answers to the ancillary questions which were raised. The researcher expected to answer the purpose of this study and to shed an understanding of the effectiveness of the Educational Management Training Program selection program.
Data Collection

Data collection from the subjects were done through a variety of manners. They were:

1. Demographic Data. Age, sex, and the number of years in the Department of Education were given by the subjects. Some were provided by the Office of Personnel Services, Department of Education.

2. EMTP, Phase I Selection Criteria Data. The Department of Education provided data on the selectee and non-selectee subjects on their achievements in the four areas used to determine selection into EMTP, Phase II, i.e., academic component, interview, observation, and peer rating.

3. Personality and Leadership Inventory Data. The Department of Education provided data on the selectee and non-selectee subjects on their sub-scale measures on the Managerial Philosophies Scale and the Management of Motive Index; the FIRO-B inventory was either administered to the subjects of the study at the program site or mailed to each subject for completion. A self-addressed, stamped, return envelope accompanied the inventory materials. The observer/raters were individually given or mailed all three inventories; after completion of the inventories, they returned them in self-addressed, stamped, return envelopes.

Procedures for Statistical Analysis

The data collected from each measure in this study were analyzed by one or more of the following statistical
Procedures: the t-test, the chi-square, and the discriminant analysis. Means and standard deviations were also calculated and used as descriptive data. For preliminary analysis, except in the case of sex, a t-test was run on either the scores or the z values of each trait or measure. The test would search for differences between the groups being measured. The chi-square treatment was used to reveal differences in the numbers of selectees and non-selectees based on the variable of sex. A discriminant analysis on the variables was performed to reveal and identify combinations of traits that were related to the selection or non-selection of candidates into the leadership group.

Statistics Used in the Analysis

1. A t-test was used to determine if significant mean differences existed between the different groups, i.e., differences between the selectees and non-selectees, differences between the selectees and observer/raters, and between the non-selectees and observer/raters.

2. The chi-square was used to determine if significant differences existed between the different groups on the sex trait.

3. Discriminant analysis was used to determine which traits made a significant contribution to a candidate either being selected or not into the leadership group. It was also employed to determine the relative importance of each of
these traits. The Discriminant analysis was expected to factor out those traits that contributed significantly to the selection processes.

Statistical Procedures for the Hypotheses Testing

Statistical procedures for the hypotheses testing rested primarily on the following procedures:

1. t-testing: Computational procedures for this test were:

\[
s^2 = \frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}
\]

where \(N_i = \) sample size of sample i

\(s_i^2 = \) variance of sample i

\[
t = \frac{(\bar{x}_1 - \bar{x}_2) - \mu(U_1 - U_2)}{\text{est} \ \sigma \ \text{diff}}
\]

where \(\bar{x}_i = \) mean sample or group i

\(\mu(U_1 - U_2) = \) expected difference between the two means (according to the null hypotheses)

\(\mu(U_1 - U_2) = 0\)
2. Chi-square: the procedures for chi-square were:

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

\[ f_e^i = \frac{(c_i r_i)}{N} \]

where \( f_o \) = obtained frequency
\( f_e \) = expected frequency
\( c \) = sum of column \( i \)
\( r \) = sum of row \( i \)

3. Discriminant Analysis: Computational analysis using this statistical procedure was:

(a) Discriminant Function:

\[ D_i = d_{i1}z_1 + d_{i2}z_2 + \ldots + d_{ip}z_p \]

where \( D_i \) = the score on the discriminant function \( i \)
\( d's \) = the weighing coefficients
\( z's \) = the standardized values of \( p \) discriminating variables that are used in the analysis

(b) Classification Procedures: Using the resulting values from the procedures above, a \( D \) is calculated for each group in the analysis. To classify a candidate, the following procedures were used:
or
\[ D_1 > \frac{1}{2} (\bar{D}_1 + \bar{D}_2) \]

or
\[ D_1 < \frac{1}{2} (\bar{D}_2 + \bar{D}_2) \]

where \( D_1 \) = the resultant score from the discriminant function for a candidate
\( \bar{D}_1 \) = D mean value for one group
\( \bar{D}_2 \) = D mean value for the other group

Calculations performed depended upon the value of \( D_1 \).

In dealing with the significance level of the computations, the probability level of \( p = .05 \) was established as an acceptable evidence of significant difference between the groups in this study.

**Hypotheses Testing**

For the individual hypothesis testing, the following was done:

1. For Hypothesis One: Hypothesis I, which has two sub hypotheses, dealt with the following: whether a significant difference at the .05 level existed between the selectees and non-selectees on the (1) demographic and (2) EMTP, Phase I Selection Criteria measures. A series of t-test on the means of the demographic and EMTP, Phase I selection criteria were made for the purpose of preliminary analysis of any differences between the groups. A chi-square analysis was done on the sex measures to reveal if any significant differences occurred.
2. For Hypothesis Two: Hypothesis II dealt with the following: whether a significant difference at the .05 level existed between the selectees and the non-selectees on the scores of inventories used to measure personality and role expectations. T-test on the scores of the sub-scales of the MPS and MMI were performed.

3. For Hypothesis Three: Hypothesis III dealt with the following: whether a significant difference at the .05 level existed between the selectees and the group of twenty-four non-selectees on the sub-scales of FIRO-B. A series of t-tests on the means of the sub-scale measures were done.

4. For Hypothesis Four: Hypothesis IV, which has two sub-hypothesis, dealt with the following: whether a significant difference at the .05 level existed between the selectees and observer/raters on the (1) demographic measures and (2) the sub-scales of the Managerial Philosophies Scale (MPS) and Management of Motive Index (MMI). A t-test on the means of the demographic and MPS and MMI sub-scale measures was made for the purpose of revealing any differences between the groups. A chi-square analysis was performed on the sex measures to reveal if any significant differences occurred.

5. For Hypothesis Five: Hypothesis V, which has two sub-hypotheses, dealt with the following: whether there was a significant difference at the .05 level between the non-selectees and observer/raters on the (1) demographic measures and (2) sub-scales of the Managerial Philosophies
(MPS) and Management of Motive Index (MMI). T-tests on the means of the demographic and MPS and MMI sub-scale measures were made for the purpose of revealing any differences between the groups. A chi-square analysis was done on the sex measures to reveal any significant differences.

6. For Hypothesis Six: Hypothesis VI dealt with the following: whether a significant difference at the .05 level existed between the selectees and the observer/raters on the sub-scales of FIRO-B. A series of t-tests on the means of each FIRO-B sub-scale measures were made for the purpose of finding any differences between the groups. For this hypothesis, the need to examine whether any demographic differences existed between the group was precluded by data already found in Hypothesis Four.

7. For Hypothesis Seven: Hypothesis VII, which has two sub-hypotheses, dealt with the following: whether a significant difference at the .05 level existed between the group of twenty-four non-selectees and the observer/raters on the (1) demographic and (2) FIRO-B sub-scale measures. T-test on the means of the demographic and FIRO-B sub-scale measures were made for the purpose of revealing any differences between the groups. A chi-square analysis was done on the sex measures to reveal if any significant differences occurred.

Ancillary Questions

To seek answers to the ancillary question number 1,
whether there were one or more criteria in the EMTP, Phase I selection criteria which might not effectively predict those who should or should not be selectees, a discriminant analysis was performed. The purpose was to factor out those traits that did contribute to the selection and non-selection process. Those that did not factor out were analyzed in the light of this question.

Ancillary question number 2 sought to find how well EMTP, Phase I scores properly classified the candidates as selectees or non-selectees. To find an answer, an analysis of the classification results from the discriminant analysis procedures was done.

For ancillary question number 3, whether the knowledge of scores on selected inventories of personality and role expectation would materially increase the accuracy of the classification of candidates as selectees or non-selectees, a discriminant analysis was performed. This was done to factor out sub-scale traits which might be used to contribute to the selection or non-selection process. Additionally, an analysis of the classification results from the discriminant analysis was performed. The purpose was to reveal how well selected scores from the discriminant analysis might help in the classification process.
Summary

Following the description of the study population and sample, the Hawaii State Department of Education EMTP, Phase I evaluation measures were described. The evaluation measures included: (1) academic coursework score, (2) interview score, (3) observation rating score, and (4) the peer observation score. Personality and role expectation inventories used in the study were then presented, followed by the design of the study and data collection. The procedures for hypotheses testing were specified and the significance level for this study was set at the .05 level. Finally, the procedures used to answer the ancillary questions were presented.
CHAPTER IV

ANALYSIS OF THE DATA

Introduction

Chapter IV contains the analysis of the three groups in the study as they pertain to personality and role expectation measures, demographics, and the Hawaii State Department of Education Educational Management Training Program (EMTP), Phase I evaluation measures. The data are analyzed in seven hypotheses, with the final section of the chapter devoted to the results of the analysis of the ancillary research questions.

Descriptive Data on the Selectees, Non-Selectees and Observer/Raters

The following descriptive data which are arrayed in Table 2 present the age and years of service of the candidates and the observer/raters who participated in the EMTP, Phase I Program during 1976, 1977, and 1978. The data are arranged by the number in each category, ranges on the demographic and criterion variables, and means, or frequency distributions.
Table 2
Numbers, Ranges, and Means of Years in Service and Age Between the 1976, 1977, and 1978 Selectees and Non-Selectees and Observer/Raters

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=51)</th>
<th>Non-Selectees (N=225)</th>
<th>Observer/Raters (N=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
<td>Range</td>
</tr>
<tr>
<td>Age</td>
<td>29-45</td>
<td>35.88</td>
<td>27-57</td>
</tr>
<tr>
<td>Years of Service</td>
<td>5-22</td>
<td>10.41</td>
<td>1-24</td>
</tr>
</tbody>
</table>

The ranges in Table 2 indicate that the non-selectee candidates have an age range wider than the selectees and observer/raters, with the selectees having the smallest range. The mean years of service between the selectees and non-selectees differ by 2.06 years; between the selectees and observer/raters, the difference is 11.41 years. The question of whether these differences in the groups reflect a difference in the population are reported in the hypotheses which follow.

Hypotheses Testing

The following sections of the chapter are devoted to presenting the findings on the seven hypotheses (see Chapter I, pages 23-24) and the ancillary questions. Each hypothesis is presented in a separate sub-section. To assure continuity in the EMTP, Phase I selection criteria scores over the
three years, it was necessary to change the raw scores into
z scores. Consequently the means and standard deviations
of the Phase I scores used a "0" mean and a standard de-
viation of "1".

Findings Related to Hypothesis One

Hypothesis One was designed to test whether there
were significant differences between the selectees and non-
selectees on the demographic and EMTP, Phase I selection
criteria measures. The hypothesis stated in the null form
is as follows:

There is no significant difference in the
demographic and EMTP, Phase I Selection
Criteria measures between the EMTP, Phase
I selectees and non-selectees

This hypothesis was divided into two sub-sections, the
first included the findings relative to the demographic
data and the second the various sub-sections of the EMTP,
Phase I selection criteria. While it was clear that the
overall criteria measures would be different, since only
the candidates who scored in the top quintile were
selected into EMTP, Phase II, the purpose of the second
part of this hypothesis was to determine whether the
differences clustered in one or more criteria or if they
were universal. Table 3 exhibits the data on demographic
characteristics and the results of the statistical tests.
Table 3

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=51)</th>
<th>Non-Selectees (N=225)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Age</td>
<td>35.88</td>
<td>4.37</td>
</tr>
<tr>
<td>No. of Years in DOE</td>
<td>10.41</td>
<td>3.97</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Males</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>No. of Females</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

*Chi-square for sex = 1.06 with 1 degree of freedom is not significant at .05 level

There were significant differences in age with the non-selectees being older and with more years of experience in the Department of Education. However, there were no significant differences in sex between the selectees and non-selectees.

The second aspect of Hypothesis One searched for significant differences in the scores on the four criteria used to select candidates into Phase II of the EMTP. The criteria were Academics, which included scores on homework assignments, quizzes on the various sessions of the EMTP, Phase I Program, the mid-term examination, and the final
examination, all of which were cumulated into one overall score that was used in the analysis; the interview, which was the score derived from a one-half hour interview with raters from the Department of Education; the Observation, which was the score each candidate received from the six or more Department of Education observer/raters; and Peer Observation, which was a technique used throughout the session. (See Chapter III, pages 60-62.) Table 4 exhibits the data on the EMTP, Phase I selection criteria measures.

Table 4

<table>
<thead>
<tr>
<th>Evaluation Characteristics</th>
<th>Selectees (N=51)</th>
<th>Non-Selectees (N=225)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>z</td>
<td>S.D.</td>
</tr>
<tr>
<td>Academics</td>
<td>0.81</td>
<td>0.60</td>
</tr>
<tr>
<td>Interview</td>
<td>0.98</td>
<td>0.78</td>
</tr>
<tr>
<td>Observation</td>
<td>0.71</td>
<td>0.58</td>
</tr>
<tr>
<td>Peer Evaluation</td>
<td>0.94</td>
<td>0.68</td>
</tr>
</tbody>
</table>

There was a difference beyond the p=.05 in each of the four criteria. The non-selectees had a lower mean score on each.

Relative to the first sub-section of Hypothesis One, the data presented a mixed model. While one of the demographic variables (sex) allowed for a failure to reject,
Findings Related to Hypothesis Two

Hypothesis Two was designed to determine if there were significant differences between the EMTP, Phase I selectees and non-selectees on the personality and leadership traits. Stating the hypothesis in the null form:

There is no significant difference between the mean scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index for those selected into the leadership ranks (EMTP, Phase II) and those not selected into the leadership ranks.

Table 5 exhibits the means and standard deviations of the sub-scales on the personality and role expectation instruments and the results of the statistical tests. The results of the analyses in Table 5 indicated significant differences between the groups on the following traits: TX, Basic Creature Comfort, and Safety and Order. In the analysis of each of these differences, the following were indicated:

1. Theory X: The analysis indicated the probability (.001) that the non-selectees were more inclined than the selectees to view subordinates as those who found work distasteful, were not as ambitious, were more motivated by comforts and security measures, and who needed a great amount of supervision.
Table 5
Means, Standard Deviations, t Values and Probabilities for Personality and Role Expectation Measures (MPS, MMI) for the 1977 and 1978 EMTP, Phase I Selectees and Non-Selectees

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=30)</th>
<th>Non-Selectees (N=135)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>TX</td>
<td>57.73</td>
<td>17.71</td>
<td>72.55</td>
<td>22.31</td>
</tr>
<tr>
<td>TY</td>
<td>70.50</td>
<td>15.25</td>
<td>71.08</td>
<td>9.38</td>
</tr>
<tr>
<td>Basic Creature Comfort</td>
<td>43.56</td>
<td>12.53</td>
<td>50.16</td>
<td>11.16</td>
</tr>
<tr>
<td>Safety and Order</td>
<td>46.30</td>
<td>12.53</td>
<td>51.30</td>
<td>11.97</td>
</tr>
<tr>
<td>Belonging and Affiliation</td>
<td>60.16</td>
<td>15.34</td>
<td>57.92</td>
<td>12.63</td>
</tr>
<tr>
<td>Ego Status</td>
<td>64.30</td>
<td>15.13</td>
<td>64.68</td>
<td>11.43</td>
</tr>
<tr>
<td>Actualization and Self-Expression</td>
<td>75.76</td>
<td>16.80</td>
<td>71.26</td>
<td>14.05</td>
</tr>
</tbody>
</table>

2. Basic Creature Comfort: The data suggested that the non-selectees were more heavily inclined toward the pursuit of basic creature comfort than were the selectees.

3. Safety and Order: The results appeared to indicate that the non-selectees were more cautious as a group and preferred a more ordered or structured environment.

Relative to Hypothesis Two, scores on three of the eight personality and role expectation measures (TX, Basic
Creature Comfort, and Safety and Order) supported a rejection of the null hypothesis, while the findings on four allowed for a failure to reject.

Findings Related to Hypothesis Three

Hypothesis Three was designed to test whether there were significant differences between the EMTP, Phase I selectees and the sample of twenty-four non-selectees on the FIRO-B measures. Stated in the null form, the hypothesis is as follows:

There is no significant difference between the mean scores on the sub-scales of FIRO-B for the selectees and a sample of twenty-four non-selectees.

Table 6 shows the data on the FIRO-B measures and the results of the statistical tests.

An analysis of Table 6 indicated significant difference between selectees and non-selectees on the following traits: SUMI and DIFFI. The analysis of these differences were as follows:

1. Desire for Contact with Others (SUMI): The results indicated that members of the non-selectee group were more prone to desire contact or interaction with others than the selectees, while the selectees were more cautious or selective with whom they desired interactions.

2. Desire to be the Invitor of Others to Make Interaction (DIFFI): The results indicated that selectees were more apt
to reach out to others for interactions than were members of the non-selectee group. This suggested that members of the non-selectee group were more prone to be guests than invitors for interactions.

Table 6

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=51)</th>
<th>Non-Selectees (N=24)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>SUMI</td>
<td>7.50</td>
<td>5.63</td>
<td>11.25</td>
<td>4.91</td>
</tr>
<tr>
<td>SUMC</td>
<td>6.80</td>
<td>3.31</td>
<td>7.12</td>
<td>3.08</td>
</tr>
<tr>
<td>SUMA</td>
<td>9.58</td>
<td>4.90</td>
<td>10.95</td>
<td>4.75</td>
</tr>
<tr>
<td>SUME</td>
<td>12.88</td>
<td>5.82</td>
<td>15.25</td>
<td>4.91</td>
</tr>
<tr>
<td>SUM</td>
<td>11.01</td>
<td>6.53</td>
<td>14.08</td>
<td>5.93</td>
</tr>
<tr>
<td>SUM</td>
<td>23.90</td>
<td>11.65</td>
<td>29.33</td>
<td>9.68</td>
</tr>
<tr>
<td>DIFFI</td>
<td>1.66</td>
<td>2.41</td>
<td>0.41</td>
<td>2.37</td>
</tr>
<tr>
<td>DIFFC</td>
<td>0.96</td>
<td>2.90</td>
<td>1.20</td>
<td>3.21</td>
</tr>
<tr>
<td>DIFFFA</td>
<td>-0.76</td>
<td>1.73</td>
<td>-0.45</td>
<td>2.88</td>
</tr>
<tr>
<td>DIFF</td>
<td>1.86</td>
<td>4.16</td>
<td>1.16</td>
<td>4.99</td>
</tr>
</tbody>
</table>

In general, the differences appeared to indicate that the non-selectee group wanted many kinds of contacts or interactions with others, but were not as discriminating
with whom they made interactions. The differences also appeared to indicate that when the selectees wanted contacts, they took the initiative to reach out for the contacts. The non-selectee group, on the other hand, had a tendency to wait for others to make the initial contact with them.

The statistical analysis produced a significant difference between selectees and non-selectees on two of the sub-scales of the FIRO-B, but not on the other eight. Thus, with the exception of the two sub-scales noted above, there is evidence to fail to reject the null hypothesis of significant difference between the two groups on the results of the FIRO-B.

Findings Related to Hypothesis Four

Hypothesis Four was designed to test whether there were significant differences between the EMTP, Phase I selectees and the observer/raters on the demographic measures and the scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index. Stating the hypothesis in null form:

There is no significant difference between the demographic variables and the mean scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index for those selected into the leadership ranks (EMTP, Phase II) and the educational officers who participated in the EMTP, Phase I as observer/raters.

Hypothesis Four was divided into two sub-sections, the first
included the findings relative to the demographic data and the second the various sub-sections of the Managerial Philosophies Scale and Management of Motive Index. On Table 7 is the data on demographic characteristics and the results of the statistical tests.

Table 7

Means, Standard Deviations, t Values, Probabilities, and a Chi-square Value for the Demographic Characteristic Measures for the 1977 and 1978 EMTP, Phase I Selectees and the Observer/Raters

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=30)</th>
<th>Observer/Rater (N=44)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>35.73 3.94</td>
<td>47.29 3.90</td>
<td>-12.44</td>
<td>.000</td>
</tr>
<tr>
<td>No. Years DOE</td>
<td>11.01 3.74</td>
<td>19.75 6.19</td>
<td>-7.55</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>12</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>18</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ X^2 = 3.99^* \]

*Chi-square for sex = 3.99 with 1 degree for freedom is significant at the .05 level

There were significant differences between the groups on each of the demographic variables. The observer/raters were older and with more years of experience in the Department of Education. A significant difference in the distribution of males and females existed between the 1977 and 1978 selectees and the observer/raters.
The distribution was almost inversely proportionate between the 1977 and 1978 selectees and the observer/raters. The distribution was almost inversely proportionate between the two groups. While the observer/raters had 63.6 per cent males and 36.4 per cent females, the selectees had 60 per cent females and 40 per cent males. It appeared that although there were more males in the observer/raters group, more females were chosen for the selectee group.

The second part of Hypothesis Four searched for significant differences on the sub-scales of the Managerial Philosophies Scale and the Management of Motive Index. Table 8 exhibits the data on these personality and leadership inventories.

The results of the analysis of the table show significant differences on two of the seven sub-scales: Basic Creature Comfort and Safety and Order. In the analysis of each of these differences, the following interpretations are warranted:

1. Basic Creature Comfort: The analysis indicated the observer/raters were more heavily inclined toward the pursuit of basic creature comfort than the selectees.
2. Safety and Order: The results appeared to indicate that the observer/raters were more cautious as a group and preferred a more ordered or structured environment.

Relative to the first sub-section of Hypothesis
Four, all of the demographic data allowed for a rejection of the null hypothesis. For the second part of the Hypothesis Four, two (Basic Creature Comfort and Safety and Order) of the seven personality and role expectation measures supported a rejection of the null hypothesis, while five of the seven measures allowed for a failure to reject.

Table 8

Means, Standard Deviations, t Values, Probabilities for Personality and Role Expectation Measures for the 1977 and 1978 EMTP, Phase I Selection and the Observer/Raters

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=30)</th>
<th>Observer/Raters (N=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>TX</td>
<td>57.73</td>
<td>17.71</td>
</tr>
<tr>
<td>TY</td>
<td>70.50</td>
<td>15.25</td>
</tr>
<tr>
<td>Basic Creature Comfort</td>
<td>43.56</td>
<td>12.53</td>
</tr>
<tr>
<td>Safety and Order</td>
<td>46.30</td>
<td>12.53</td>
</tr>
<tr>
<td>Belonging and Affiliation</td>
<td>60.16</td>
<td>15.34</td>
</tr>
<tr>
<td>Ego Status</td>
<td>64.30</td>
<td>15.13</td>
</tr>
<tr>
<td>Actualization and Self-Expression</td>
<td>75.76</td>
<td>16.80</td>
</tr>
</tbody>
</table>
Findings Related to Hypothesis Five

Hypothesis Five was designed to test whether there were significant differences between the EMTP, Phase I non-selectees and the observer/raters on the demographic measures and the scores on the sub-scales of the Managerial Philosophies Scale and the Management of Motive Index.

The hypothesis stated in null form is as follows:

There is no significant difference between the demographic variables and the mean scores on the sub-scales of the Managerial Philosophies Scale and the Management Motive Index of leadership and personality traits for those not selected into the leadership ranks (EMTP, Phase II) and the educational officers who participated as observer/raters.

Hypothesis Five was divided into two sub-sections. The first included the findings relative to the demographic data and the second dealt with the various sub-sections of the Managerial Philosophies Scale and the Management of Motive Index. The data on demographic characteristics and the results of the statistical tests are presented in Table 9.

There were significant differences between the groups on two of the demographic variables (age and years of service) with the observer/raters being older and with more years of experience in the Department of Education. However, there was no significant difference in sex.

The second aspect of Hypothesis Five searched for significant differences on the sub-scales of the Managerial
Philosophies Scale and the Management of Motive Index.

Table 10 exhibits the data on these personality and role expectation inventories.

Table 9


<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-Selectees (N=135)</th>
<th>Observer/Raters (N=44)</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>37.17</td>
<td>7.34</td>
<td>47.29</td>
<td>3.90</td>
<td>-11.72</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Service</td>
<td>9.08</td>
<td>4.17</td>
<td>19.75</td>
<td>6.19</td>
<td>-10.66</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Males</td>
<td>78</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Females</td>
<td>57</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Chi-square for sex = .44 with 1 degree of freedom is not significant at the .05 level

Results of the analysis on Table 10 were that significant differences on two of the seven sub-scales (TX and Actualization and Self-Expression) existed. In the analysis of each of these differences, the following were indicated:

1. Theory X. The analysis revealed that the non-selectees were more inclined than the observer/raters to view subordinates as those who found work distasteful, were not as
ambitious, were more motivated by comforts and security measures, and who needed a great amount of supervision.

2. Actualization and Self-Expression. The analysis led one to believe that as a group the observer/raters were more mature, having achieved more actualization of selves and were more capable of expressing themselves than non-selectees.

Table 10

Means, Standard Deviations, t Values and Probabilities for the Sub-Scales of the MPS and MMI for the 1977 and 1978 EMTP, Phase I Non-Selectees and the Observer/Raters

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-Selectees (N=135)</th>
<th>Observer/Raters (N=44)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>TX</td>
<td>72.55</td>
<td>22.31</td>
<td>60.36</td>
<td>17.07</td>
</tr>
<tr>
<td>TY</td>
<td>71.08</td>
<td>9.38</td>
<td>72.27</td>
<td>7.20</td>
</tr>
<tr>
<td>Basic Creature Comfort</td>
<td>50.16</td>
<td>11.16</td>
<td>49.09</td>
<td>8.74</td>
</tr>
<tr>
<td>Safety and Order</td>
<td>51.30</td>
<td>11.97</td>
<td>53.45</td>
<td>9.11</td>
</tr>
<tr>
<td>Belonging and Affiliation</td>
<td>57.92</td>
<td>12.63</td>
<td>58.04</td>
<td>8.06</td>
</tr>
<tr>
<td>Ego Status</td>
<td>64.68</td>
<td>11.43</td>
<td>63.27</td>
<td>6.75</td>
</tr>
<tr>
<td>Actualization and Self-Expression</td>
<td>71.26</td>
<td>14.05</td>
<td>76.18</td>
<td>11.63</td>
</tr>
</tbody>
</table>


Relative to the first sub-section of Hypothesis Five, the data presented a mix model. Two of the three demographic data (age and years of service) allowed for a rejection of the null hypothesis; one (sex) led to a failure to reject the null hypothesis. For the second part of the Hypothesis Five, two (TX and Actualization and Self-Expression) of the seven personality and role dimension measures led to a rejection of the null hypothesis while five allowed for a failure to reject.

Findings Related to Hypothesis Six

Hypothesis Six was designed to determine if there were significant differences between the EMTP, Phase I selectees and the observer/raters on the scores on the sub-scales of FIRO-B. Stating the hypothesis in null form:

There is no significant difference between the mean scores on the sub-scales of FIRO-B for those selected into the leadership ranks (EMTP, Phase II) and the observer/raters.

Table 11 exhibits the data on the sub-scales and the results of the statistical tests.

The results of the analysis shown on Table 11 indicated significant differences on two of the ten sub-scales: SUMI, SUMA. In the analysis of each of these differences, the following is indicated:

1. Desire for Contact with Others (SUMI): The results
indicated that the selectees were more prone to make contact or interaction with others than the observer/raters. It may be reasonable to state that, perhaps, the observer/raters were less inclined to make interactions, as they might be more selective with whom they came in contact.

Table 11


<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selectees (N=30)</th>
<th>Observer/Raters (N=44)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>SUMI</td>
<td>8.90</td>
<td>5.70</td>
<td>6.50</td>
<td>4.26</td>
</tr>
<tr>
<td>SUMC</td>
<td>6.63</td>
<td>2.90</td>
<td>7.75</td>
<td>3.41</td>
</tr>
<tr>
<td>SUMA</td>
<td>10.53</td>
<td>4.74</td>
<td>8.09</td>
<td>4.18</td>
</tr>
<tr>
<td>SUME</td>
<td>13.60</td>
<td>5.78</td>
<td>12.04</td>
<td>4.83</td>
</tr>
<tr>
<td>SUMW</td>
<td>12.46</td>
<td>6.34</td>
<td>10.29</td>
<td>5.74</td>
</tr>
<tr>
<td>SUM</td>
<td>26.06</td>
<td>11.64</td>
<td>22.34</td>
<td>9.94</td>
</tr>
<tr>
<td>DIFFI</td>
<td>1.56</td>
<td>2.68</td>
<td>2.27</td>
<td>2.42</td>
</tr>
<tr>
<td>DIFFC</td>
<td>0.23</td>
<td>2.75</td>
<td>0.06</td>
<td>2.84</td>
</tr>
<tr>
<td>DIFFA</td>
<td>- 0.66</td>
<td>1.37</td>
<td>- 0.59</td>
<td>1.89</td>
</tr>
<tr>
<td>DIFF</td>
<td>1.13</td>
<td>3.43</td>
<td>1.75</td>
<td>3.72</td>
</tr>
</tbody>
</table>
2. Desire for Interaction with People in All Areas (SUMA): Like the above, the selectees appeared more willing to make contacts with others; additionally, they appeared ready to make many more kinds of interactions with others than the observer/raters, be it for social, personal, or business relationships.

Relative to Hypothesis Six, two (SUMI AND SUMA) measures led to a rejection of the null hypothesis, while eight of the ten measures allowed for a failure to reject.

Findings Related to Hypothesis Seven

Hypothesis Seven was designed to test whether there were significant differences between the sample of twenty-four non-selectees and the observer/raters on the demographic measures and the FIRO-B sub-scale measures. The hypothesis stated in the null form is as follows:

There is no significant difference between the demographic variables and the mean scores on the sub-scales of FIRO-B for sample of non-selectees and the observer/raters.

Hypothesis Seven was divided into two sub-sections: the first included the findings relative to the demographic data and the second the various sub-sections of FIRO-B. While demographic measures were previously exhibited for the observer/raters, they are included in the following table to reveal whether any significant differences existed between them and the sample of twenty-four non-selectees.
The data on demographic characteristics and the results of the statistical tests are shown in Table 12.

Table 12

Means, Standard Deviations, t Values, Probabilities and a Chi-square Value for the Demographic Characteristic Measures for the Twenty-Four Non-Selectees and the Observer/Raters

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-Selectees (N=24)</th>
<th>Observer/Raters (N=44)</th>
<th>t Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Age</td>
<td>36.54</td>
<td>6.11</td>
<td>47.29</td>
<td>3.90</td>
</tr>
<tr>
<td>Years of Service</td>
<td>8.41</td>
<td>4.44</td>
<td>19.75</td>
<td>6.19</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of Males</td>
<td>14</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of Females</td>
<td>10</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

*Chi-square for sex = .16 with 1 degree of freedom is not significant at the .05 level

Data on Table 12 reveal that there were significant differences on two of the demographic variables (age and years of service) with the observer/raters being older and with more years of experience in the Department of Education. However, there was no significant difference in sex.

The second part of Hypothesis Seven searched for significant differences on the sub-scales of the FIRO-B. Table 13 exhibits the data on these sub-scales.
### Table 13

Means, Standard Deviations, t Values and Probabilities for the FIRO-B Leadership Characteristic Measures for the Observer/Raters and the Group of Twenty-Four Non-Selectees

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-Selectees (N=24)</th>
<th>Observer/Raters (N=44)</th>
<th>t value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUMI</td>
<td>11.25  4.91</td>
<td>6.50  4.26</td>
<td>-4.16</td>
<td>.000</td>
</tr>
<tr>
<td>SUMC</td>
<td>7.12   3.08</td>
<td>7.75  3.41</td>
<td>0.75</td>
<td>.459</td>
</tr>
<tr>
<td>SUMA</td>
<td>10.95  4.75</td>
<td>8.09  4.18</td>
<td>-2.75</td>
<td>.012</td>
</tr>
<tr>
<td>SUME</td>
<td>15.25  4.91</td>
<td>12.04 4.83</td>
<td>-2.60</td>
<td>.012</td>
</tr>
<tr>
<td>SUMW</td>
<td>14.08  5.93</td>
<td>10.29 5.74</td>
<td>-2.57</td>
<td>.012</td>
</tr>
<tr>
<td>SUM</td>
<td>29.33  9.68</td>
<td>22.34 9.94</td>
<td>-2.80</td>
<td>.007</td>
</tr>
<tr>
<td>DIFFI</td>
<td>0.41   2.37</td>
<td>2.27  2.42</td>
<td>3.04</td>
<td>.003</td>
</tr>
<tr>
<td>DIFFC</td>
<td>1.20   3.21</td>
<td>0.06  2.84</td>
<td>-1.51</td>
<td>.137</td>
</tr>
<tr>
<td>DIFFA</td>
<td>-0.45  2.88</td>
<td>-0.59 1.89</td>
<td>-0.20</td>
<td>.841</td>
</tr>
<tr>
<td>DIFF</td>
<td>1.16   4.99</td>
<td>1.75  3.72</td>
<td>0.55</td>
<td>.587</td>
</tr>
</tbody>
</table>

Results of the analysis on Table 13 indicated significant differences on six of the ten sub-scales: SUMI, SUMA, SUME, SUMW, SUM, and DIFFI. In the analysis of each of these differences, the following was indicated:

1. Desire for Contact with Others (SUMI): The results indicate that the non-selectee group of twenty-four members were more open to make contact or interaction with others than the observer/raters. It may be reasonable to
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state that perhaps the observer/raters were less prone to
make interactions, as they may be more selective with whom
they came in contact.
2. Desire for an Exchange of Affection and Warmth (SUMA):
The results appeared to indicate that the non-selectee
group were more prone to be warm and affectionate than the
observer/raters.
3. Desire to Initiate Behavior Towards Others (SUME): The
results indicated that the 24 non-selectee group were more likely
to open communication and interaction with others than the
observer/raters.
4. Desire to have Others Initiate Behavior Towards You
(SUMW): As SUME indicated that the non-selectee group were
more prone to initiate behavior towards others, the result
of SUMW indicated that this same group were also receptive
to have others make the move towards or take the step in
making interactions with them. They appeared to be more
receptive to others making interaction towards them than
the observer/raters.
5. Desire for Interaction with People in All Areas (SUM):
Like (1) and (3) above, the non-selectee group appeared
more likely to make contact with others; additionally, they
appeared ready to make many more kinds of interactions with
others than the observer/raters, be it for social, personal,
or business interactions.
6. Desire to be the Invitor of Others to Make Interaction (DIFFI): The results indicated that the observer/raters were more apt than the members of the non-selectee group to reach out to others for interactions; this appeared to indicate that members of the non-selectee group were more apt to be guests than invitors for interactions.

In general the differences appeared to indicate that the members of the non-selectee group were more inclined to interact with people and were more warm and affectionate; it appeared, too, that the observer/raters were more selective with whom they interacted, as they would rather do the inviting of others.

Relative to the first sub-section of Hypothesis Seven, the data presented a mixed model. Two of the three demographic data allowed for a rejection of the null hypothesis; one (sex) led to a failure to reject the null hypothesis. For the second part of the hypothesis, four of the ten FIRO-B sub-scale measures allowed for a failure to reject while six (SUMI, SUMA, SUME, SUMW, SUM, and DIFFI) led to a rejection of the null hypothesis.

**Findings Relative to the Ancillary Questions**

The following section of the chapter is devoted to answering the three ancillary questions. (See Chapter I, pages 24-25.) Each ancillary question is presented in a
Findings Related to Ancillary Question One

Ancillary Question One posed the following:

Among the four EMTP, Phase I criteria used to admit candidates into Phase II, was there one or more criteria that did not effectively predict between the selectees or non-selectees?

To answer this question, a discriminant analysis was performed. Analysis of the data revealed three criteria (Academics, Interview, and Peer Evaluation) which did significantly contribute to the selection or non-selection process. The criterion Observation did not effectively predict between selectees and non-selectees. Table 14 exhibits the discriminant analysis findings on the EMTP, Phase I criteria. In the table the variables are listed in the order of inclusion. The F value for each of the coefficients exceeded the .05 level of significance.

Findings on Table 14 revealed three selection criteria variables reached the required level of significance. These variables included the Academic criterion, the Interview criterion, and the Peer Evaluation criterion. The failure of the Observation criterion to be included indicated that it was not an effective evaluation measure.
Table 14


<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Coefficients</th>
<th>Canonical Correlation</th>
<th>Chi-Square</th>
<th>Significance (3 D.F.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>0.60098</td>
<td>0.591</td>
<td>117.38</td>
<td>0.000</td>
</tr>
<tr>
<td>Peer Evaluation</td>
<td>0.47584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>0.40165</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification Results

<table>
<thead>
<tr>
<th>Group</th>
<th>Per Cent Correctly Classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selectees</td>
<td>84.3 (43 out of 51)</td>
</tr>
<tr>
<td>Non-Selectees</td>
<td>80.0 (180 out of 225)</td>
</tr>
</tbody>
</table>

Per cent of grouped cases correctly classified: 80.8

Findings Related to Ancillary Question Two

Ancillary Question Two is:

How well did the scores of the candidates on the EMTP, Phase I criteria properly classify them as selectees and non-selectees?

Classification results are found in Table 14 above.

Using the Academic, Interview, and Peer Observation variable measures, it was possible to properly classify the candidates 80.8 per cent of the time.
Findings Related to Ancillary Question Three

Ancillary Question Three posed the following:

Will knowledge of scores on selected inventories of personality and role expectation materially increase the accuracy of classification of candidates as selectees or non-selectees?

Ancillary Question Three, like Ancillary Question One, was divided into two sub-sections. The first was to identify which of the Managerial Philosophies Scales and Management of Motive Index sub-scale measures might contribute significantly to the selection process. A discriminant analysis was used to perform this analysis. The second was to analyze the effectiveness of the classification results. Table 15 exhibits the discriminant analysis on the selected inventory scores of personality and role expectation. In the table the variables are listed in the order of inclusion and the F value for each of the coefficients exceeded the .05 level of significance.

Findings on Table 15 showed three personality and role dimension sub-scales which reached the required level of significance and therefore might be used in the EMTP, Phase I selection process. These measures are TX, TY, and Basic Creature Comfort. Using these variable measures, it would be possible to correctly classify 64.2 per cent of the time.
Table 15
Analysis of the Discriminant Function on Sub-Scale Measures of MMI and MPS for the 1977 and 1978 EMTP, Phase I Selectees and Non-Selectees

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Coefficients</th>
<th>Canonical Chi-Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>0.81317</td>
<td>0.309</td>
<td>15.971</td>
</tr>
<tr>
<td>Basic Creature</td>
<td>0.60440</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort</td>
<td>0.30933</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification Results

<table>
<thead>
<tr>
<th>Group</th>
<th>Per Cent Correctly Classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selectees</td>
<td>65.5 (19 out of 29)</td>
</tr>
<tr>
<td>Non-Selectees</td>
<td>63.9 (85 out of 133)</td>
</tr>
</tbody>
</table>

Per cent of grouped cases correctly classified: 64.2

Summary

This chapter presented the findings of the seven hypotheses and three ancillary questions. Each hypothesis was tested by performing a t-test of the means of those data that were interval scaled; a chi-square was done on the nominal data. In addition, a discriminant analysis was performed on the EMTP, Phase I criterion measures in an attempt to ferret out those variables which contributed
significantly to the selection process. An analysis of the classification function revealed the effectiveness of the select discriminant function variables. Finally, a discriminant analysis was performed on the sub-scales of MPS and MMI to factor out variables which might contribute to the selection or non-selection of candidates into Phase II. A classification analysis followed to reveal the effectiveness of the discriminant function variables.

Findings from the hypotheses testing revealed the selectees to be significantly different from the non-selectees on all of the EMTP, Phase I criteria. The non-selectees were more Theory X oriented than the selectees and leaned more heavily toward basic creature comfort and safety and order.

When the analysis included the observer/raters, they were found to be older and with more years of service than the selectees and non-selectees. On measures relating to interrelationships, observer/raters were more select with whom they related. An interesting finding was revealed when observer/raters were compared to the selectees and the twenty-four non-selectees on the FIRO-B sub-scale measures. These selectees differed from the observer/raters on twenty per cent of the FIRO-B sub-scales, while the group of twenty-four non-selectees differed from the observer/raters on sixty per cent of the sub-scale measures.
Findings for the ancillary questions revealed the EMTP, Phase I criterion, Observation, not to be an effective evaluation measure. Three EMTP, Phase I variables (Academics, Interview, and Peer Observation) properly classified the candidates eighty per cent of the time. The findings further included three personality and role dimension variables which properly classified the candidates as selectees or non-selectees sixty-four per cent of the time.

Of the seven hypotheses posed, none were completely rejected since in no case did all the sub-scales point to such a conclusion. Based on the relative numbers of significant differences, the following appears warranted: in the portions of Hypotheses One, Four, Five, and Seven that dealt with demographic data, the non-selectees were significantly different on two of the measures (age and years of service) but not on sex. The hypotheses that tested the scales of the Managerial Philosophies Scale and the Management of Motive Index (Two, Four, and Five) produced more failures to reject than to reject. The results of the hypotheses that involved FIRO-B (Three, Six, and Seven) would warrant a failure to reject the null on two (Hypotheses Three and Six) and the rejection of the null in the Seventh Hypothesis.
CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Introduction

Chapter V includes a summary of the problems that were investigated, the methodology and statistical analysis used, and the major findings of this study. Conclusions were proffered as they related to the major hypotheses and ancillary research questions. Finally, implications for the selection process of future educational leaders in Hawaii were offered.

Summary

The study focused on differences and relationships among personality, role expectations, selection criteria, and individual characteristics in a sample of candidates in the Educational Management and Training Program (EMTP). A short historical background of the efforts the Department of Education has used to select and train administrative officers during the last three decades portrayed a process which had changed from an unorganized non-system in the 1950's to the relatively well-planned program by the mid-seventies.

The theoretic underpinning of the study was the Getzels-Guba Social Systems Model, which provides a
conceptual view of the super-ordinate-subordinate relationships or social processes in administration. The model advances the construct that the interaction of two classes of phenomena, i.e., the institutional or nomothetic and the personal or idiographic dimensions, results in observed behavior. The nomothetic dimension is comprised of the descriptors, institution-role-expectation and the idiographic dimension is comprised of the individual-personality-need disposition. The aspects of the model which were particularly pertinent to the study were needs disposition and role expectations, since they described potential interrelationships which became the focus for some of the hypotheses that were subsequently tested.

Problems That Were Investigated

The three problems that were investigated were:

(1) the accuracy of the EMTP selection criteria as a tool for classification of candidates; (2) the determination of whether there were differences between the groups of selectees, non-selectees, and practicing administrators in their perceptions of role expectations and need-disposition; and (3) the determination of whether differences existed between the groups of selectees, non-selectees, and practicing administrators on selected demographic traits.

Seven hypotheses and three ancillary questions were posed in the study. They were:
1. Hypothesis One: Whether a significant difference existed between the selectees and non-selectees on the demographic variables and the mean scores on measures of the EMTP, Phase I selection criteria.

2. Hypothesis Two: Whether a significant difference existed between the selectees and the non-selectees on two personality and role expectation inventory measures (the Managerial Philosophies Scale (MPS) and the Management of Motive Index (MMI)).

3. Hypothesis Three: Whether a significant difference existed between the selectees and the group of twenty-four non-selectees on the sub-scales of FIRO-B, a third personality measure.

4. Hypothesis Four: Whether a significant difference existed between the selectees and the observer/raters on demographic variables and the measures of the personality and role expectation inventories (MPS, MMI).

5. Hypothesis Five: Whether a significant difference existed between the non-selectees and observer/raters on demographic variables and the personality and role expectation inventories (MPS, MMI).

6. Hypothesis Six: Whether a significant difference existed between the selectees and observer/raters on the sub-scales of FIRO-B.

7. Hypothesis Seven: Whether a significant difference
existed between the group of twenty-four non-selectees and observer/raters on the sub-scales of FIRO-B.

Three ancillary questions were also posed. They were:

1. Ancillary Question One: Whether there were one or more EMTP, Phase I criteria that did not effectively predict between the selectees and non-selectees.

2. Ancillary Question Two: How well did the EMTP, Phase I scores properly classify the candidates as selectees or non-selectees?

3. Ancillary Question Three: Whether the knowledge of the scores on selected inventories of personality and role expectation materially increased the accuracy of classification of candidates as selectees or non-selectees.

The Methodology of the Study

To test the hypotheses of the study, a population to which the findings could be generalized was determined. A non-random sample was selected. A methodology was developed and implemented. Finally, appropriate statistical methods were applied to the data to generate the findings which were reported.

Population and Sample: The population to which the study generalized were all the candidates who have participated in the EMTP, Phase I from 1976 through 1982. The
sample included the selectees and non-selectees who participated in the 1976, 1977, and 1978 EMTP, Phase I. A sample of educational officers who served as observer/raters in the EMTP, Phase I Program was a subsidiary population of the study.

The Variables and Data Collection: There were three independent variables, the groups of selectees, non-selectees, and observer/raters. Twenty-four dependent variables were used to test various aspects of leadership potential among the groups. These variables are listed in Chapter 3, pages 65-66.

Data from the sample was collected either from the files of the Hawaii State Department of Education Personnel Services Division or by the researcher. Personality and role expectation measures (MPS, MMI) for the candidates were provided by the Department of Education Personnel Services Division and the Department of Educational Administration of the College of Education, University of Hawaii; measures from the observer/raters were sent to the researcher. Scores on written work and tests, an observation schedule, an intensive interview, and peer observation were described in detail in Chapter I. The EMTP, Phase I criteria scores were provided for by the Department of Education Personnel Services Division. The data for study included demographic, personality and role expectation,
and EMTP, Phase I selection criteria.

**Statistical Methods Used**

To test the hypotheses, t-tests were used to determine whether there were significant differences between the selectees, non-selectees, and observer/raters on age and number of years in service; a chi-square was used to test for differences by sex (see Hypotheses One, Four, Five, and Seven). A t-test was run to find differences between the groups on the EMTP, Phase I selection criteria (Hypothesis One). Differences between the groups on personality and role expectation measures (MPS, MMI, and FIRO-B) were also tested, using the t-tests (Hypotheses Two, Three, Four, Five, Six, and Seven).

In examining Ancillary Questions One and Two, a discriminant analysis was run on the EMTP, Phase I selection criteria to factor out those functions that effectively predicted which candidates would be classified as selectees or non-selectees. Finally, for Ancillary Question Three, a discriminant analysis was performed on the personality and role expectation measures (MPS, MMI) to identify which might effectively contribute to the selection process.

**Limitations of the Study**

Because the first two groups of the 1976 EMTP, Phase I sessions were not administered the Managerial
Philosophies Scale and Management Motive Index inventories, they were compared mainly on the demographic variable measures and the EMTP, Phase I selection criteria scores. The 1976 selectees, however, were inventoried on the FIRO-B. The study accepted the tendency for those who were surveyed or inventoried on personality and role dimension to make themselves look better than they felt or thought they were.

Findings

The findings from the seven hypotheses and the three ancillary questions are reported on this section.

Hypothesis One: Did a significant difference exist between the selectees and non-selectees on demographic and EMTP, Phase I selection criteria measures? The findings were as follows: The non-selectees were significantly older than the selectees and with less years of service in the Department of Education. There were no significant differences in sex distribution between them. The selectees scored higher and were significantly different than the non-selectees on each of the four EMTP, Phase I selection criterion measure (Academics, Observation, Interview, and Peer Observation).

Hypothesis Two: Was there a significant difference between the selectees and non-selectees on their responses on the scales of MPS and MMI? Findings of the analysis showed:
The non-selectees differed significantly from the selectees on the following measures: Theory X, Basic Creature Comfort, and Safety and Order. Of particular interest is the non-selectees' heavier orientation toward the Theory X dimension.

**Hypothesis Three:** Whether a significant difference occurred on the FIRO-B measures between the selectees and the group of twenty-four non-selectees. The analysis of the data revealed the following:

The non-selectees were significantly different than the selectees on two sub-scales: the SUMI (the desire for contact with others) and DIFFI (whether one would rather be the invitor or the guest). The higher score by the non-selectees on SUMI indicated their greater desire to make contact or interactions with others; however, their lower score on DIFFI indicated that they would rather be invited to make interactions. The selectees were more cautious than the non-selectees in making interactions, but they were more apt to reach out to others.

**Hypothesis Four:** Did a significant difference exist between the selectees and observer/raters on the demographic variables and the personality and role expectation inventories (MPS, MMI)? On the demographic variables and the seven sub-scale measures in the inventories, the following was found:

The observer/raters were significantly older than the
selectees with more years of service in the Department of Education. Significant differences in the distribution of males and females between the groups were found. While the observer/raters group had 36.4 per cent females and 63.6 per cent males, the selectees were comprised of 60 per cent females and 40 per cent males, an inversely proportionate distribution.

While there were no significant differences in the sub-scale measures of the Managerial Philosophies Scale, the selectees differed significantly from the observer/raters on two of the Management Motive Index sub-scale measures: Basic Creature Comfort and Safety and Order. The findings indicated that the observer/raters group placed a heavier emphasis on these two needs.

Hypothesis Five: Was there a significant difference between the observer/raters and the non-selectees on demographic variables and personality and role expectation inventories (MPS, MMI)? The analysis of the data revealed the following: The observer/raters were significantly older than the non-selectees and with more years of service in the department. On the MPS and MMI inventories, significant differences between the two groups were found in two areas: Theory X and Actualization and Self-Expression. Responses of the non-selectees were significantly higher on the Theory X Sub-scale measure than the observer/raters. On the other
hand, the observer/raters exhibited a significantly higher score on the actualization and self-expression measure. This finding led to an indication that on the need hierarchy scale, the observer/raters were more actualized than the non-selectees.

Hypothesis Six: Whether there was a significant difference between the selectees and observer/raters on the FIRO-B inventory. From the analysis, the following was indicated: Significant differences between the two groups occurred in two sub-scales: SUMI (the desire for contact with others) and SUMA (the desire for an exchange of affection and warmth). The selectees were significantly higher on both sub-scale measures, as they were more prone to have contacts with others and exchange affection and warmth. Sub-scale measures on the other eight were not significantly different.

Hypothesis Seven: Were there significant differences between the group of twenty-four non-selectees and observer/raters on the demographic variables and the sub-scale measures of FIRO-B? Findings relative to this hypothesis were: The observer/raters were significantly older than the twenty-four non-selectees and with more years of service in the department.

Of the ten sub-scale measures in FIRO-B, there were significant differences between the two groups on six of them. They were: SUMI (desire for contact with others),
SUMA (desire for exchange of affection and warmth), SUME (desire to initiate behavior towards others), SUMW (desire to have others initiate behavior towards you), SUM (desire for interaction with people in all areas) and DIFFI (whether one rather be the invitor or the guest). The observer/raters' higher scores on DIFFI indicated that they were more likely than the non-selectees to be the persons who made the invitation for interactions or reached out to others for the interactions. The non-selectees, on the other hand, had a greater desire for interactions with others, a greater desire for an exchange of affection and warmth, and a greater desire to initiate behavior toward others. Further, when the desire for interaction with others in all areas, i.e., in personal, social, or business transaction, and the desire to have others initiate behavior or interactions toward them were compared between the groups, the non-selectees were significantly higher on both measures.

The findings for each of the ancillary questions are presented below:

Ancillary Question One: Were there one or more EMTP, Phase I selection criteria that did not effectively predict between the selectees and non-selectees? Findings from the first hypothesis showed that the selectees and non-selectees differed significantly when they were measured on the EMTP,
Phase I selection criteria. The selectees surpassed the non-selectees in each area. However, when the discriminant analysis was run on the criteria, only three of the four measures discriminated between one being a selectee or a non-selectee. The omission of the Observation measure from the discriminant function suggested that as a selection instrument, it lacked predictive discriminatory power due to shortcomings in validity or reliability or to some other factor not yet revealed.

Ancillary Question Two: How well were the candidates classified as selectees or non-selectees, using the EMTP, Phase I selection criteria scores? From the analysis of the data, the following were indicated: Relative to Ancillary Question One above, three EMTP, Phase I variables were factored out by the discriminant analysis and were used as a predictive measure on the candidates. Using these variables, it was found that 80.8 per cent of the candidates were properly classified as selectees or non-selectees. The other 19.2 per cent of the candidates were not properly classified, using the three variables which were factored into the equation.

Ancillary Question Three: Will knowing the scores on the personality and role expectation inventories materially increase the classification accuracy of the candidates as selectees or non-selectees? From the test analysis the
following was revealed: When the discriminant analysis was run on the inventory measures (MPS, MMI), three of seven sub-scale measures were factored out which could be used to predict candidates as selectees or non-selectees. They were TX, TY, and Basic Creature Comfort. Using them in a classification analysis resulted in 64.2 per cent of the candidates properly classified as selectees or non-selectees. This suggested that use of the personality and role expectation inventory scores as a classification instrument would offer a classification effectiveness which would be 14.2 per cent better than chance correct classification.

Conclusions

Based upon the findings and analysis of this study of the Educational Management Training Program, the following conclusions are warranted:

1. The selectees and non-selectees were significantly different on each of the EMTP, Phase I criterion. The selectees scored higher on each criterion. However, when the criteria measures were used to evaluate and classify the candidates as selectees or non-selectees, only three (Academics, Interview, and Peer Evaluation) were statistically significant to be used as selection measures. The EMTP, Phase I criterion Observation failed to meet the
significance level for use as a predictive measure. This suggested that its use as an instrument for the EMTP, Phase I Program needed to be further analyzed and validated. In the study it was not an effective predictive criterion.

2. The non-selectees were older than the selectees, but had fewer years of service than the selectees. This meant that between the non-selectees and selectees, the selectees were more experienced in the department when they were chosen to enter the EMTP, Phase II.

3. Members from the non-selectee group were generally more traditional in their managerial philosophy. They were higher in the Theory X orientation when compared to both the selectees and observer/raters.

4. Analysis of the personality and role dimension inventories revealed selectees were more willing to be risk-takers than non-selectees. The selectees were less traditional in their managerial philosophy and less concerned about basic creature comforts and safety and order than the non-selectees.

5. There were different cut-off scores on the four selection criteria from year to year. The lack of continuity in scoring produced the effect, perhaps unwittingly, of changing the standards from one year to the next. Thus, it
may have been possible that the selectee group from one year would have had to have higher scores than those of another year; conversely, it might have meant that an individual who was not selected in a year when the cut-off scores were relatively high would have been selected had he or she been fortunate enough to have chosen a different year to volunteer for EMTP, Phase I.

6. While the two personality and role dimension inventories (Managerial Philosophies Scale and Management of Motive Index) were administered to all the candidates, their use in the selection process has not been fully explored by the department. When a discriminant analysis was run on these seven sub-scale measures of the inventory, three of the traits (TX, TY, and Basic Creature Comfort) were factored out for use as a predictive tool. Using the scores of the candidates on the three traits, it was possible to correctly classify 64.2 per cent of them as selectees or non-selectees.

7. When the FIRO-B inventory was used in the analysis, it gave indications that the selectees were closer in interpersonal relations make-up to the observer/raters than the non-selectees. The selectees differed from the observer/raters on 20 per cent of the traits. These were indicators that the selectees mirrored more the observer/raters than the non-selectees. Additionally, the FIRO-B measures gave
indications that when one entered the educational officer tanks, he might experience a somewhat different set of interpersonal relationships, since the observer/raters were more selective with whom they desired interactions.

8. When the selection criteria were used as variables in a discriminant analysis procedure, eighty per cent of the participants were correctly classified. By multiplying the number of candidates in the first three years by the per cent of classification, it would appear that the Department of Education had at least forty-four individuals who could have been made selectees, but were misclassified. Further, these forty-four candidates may have qualified as selectees had the department set established standards of qualifications, rather than basing their decisions on year by year norms. These forty-four non-selectees had EMTP, Phase I trait measures similar to the fifty-one selectees.

Implications

The Hawaii State Department of Education professes to seek the best personnel from its ranks to become administrative leaders. This study analyzed much of the data that pertained to the selection procedures of the Educational Management Training Program (EMTP), Phase I. The results of the study suggest a number of implications for further research and possibly decision-making relating to
the area of selection of educational officers.

Implications for EMTP, Phase I Selection Criterion

The study tested application of the current selection criteria for the EMTP. However, the relative value of each criterion in the selection process is in doubt since there have been no studies to empirically validate their predictive power. The study particularly shows that EMTP, Phase I Observation criterion bears further investigation, since its use as a discriminating tool is questionable.

Implications for Standards in EMTP, Phase I Criteria Measures

The study has shown that when the classification of EMTP, Phase I participants were made according to the discriminant analysis procedures, several individuals may have been misclassified and therefore were not selected. This suggests that the Department of Education needs to explore in depth the type of criteria standards it is using from year to year. Specifically, this suggests that the department should explore the need for establishing a standard rather than a cut-off score which fluctuates from year to year in the EMTP, Phase I measures. Continuing the current system of establishing yearly norms for the selection process may deprive the department of finding more
individuals who may be qualified to become educational officers.

**Implications for Personality and Leadership Traits**

This data appear to indicate that the selectees are more similar to the observer/raters than the non-selectees. Whether this means that the selection process has a bias which favors persons who present an image similar to the current administrators may be a fruitful area of further study. The effect of such a tendency, if it exists, would be to perpetuate a particular management style which may, in essence, dampen creativity and the emergence of different ideas.

**Implications for Validation Studies**

Members selected into the educational ranks were successful in that they scored the highest in all four EMTP, Phase I criteria measures. However, the selection process has only assured us that they were successful participants according to these measures. There are no assurances that they will become successful administrators, as these selectees were not measured against a group of successful educational officers. This indicates, then, that the department needs to seek or conduct studies on who are successful educational officers, and when such studies are completed, to seek applicants who measure up to the
abilities and characteristics of these successful administrators.

Implications for Curriculum and Training

While the use of the current EMTP, Phase I curriculum and training standards have been used since the inception of the EMTP, Phase I, with periodic modifications, there have been no studies nor assurances that its curriculum and training standards best help to train the potential educational officers. Until the Department of Education initiates studies on characteristics of successful educational administrators and then match the curriculum and training of potential administrators to those qualities, the training portion of the EMTP, Phase I Program is questionable.
Appendix 1

Data Collection Sheet

I.D. #
Circle I.D. Code number if candidate was selected for EMTP, Phase II

I. Age ___ Sex ___ Years in the Hawaii State DOE ___

II. From EMTP, Phase I: Scores used for selection purposes

(a) Academic Score ______ Quintile Score ______
(b) Interview Score ______ Quintile Score ______
(c) Observation/Rating Score ______ Quintile Score ______
(d) Peer Observation/Rating Score ______ Quintile Score ______
(e) Other major score(s) or rating(s) used for selection purposes _________________________

(Please note what criteria and score member received)
Appendix 2

Profile Summary Graph

Material in this appendix indicates scaling for the Management of Motive Index (MMI). The shaded area represents the average range.
Appendix 3

PHILOSOPHY BAR GRAPH

The graph below is used to plot the scores from the Managerial Philosophies Scale. The shaded area represents the average range.
Appendix 4

Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) Scale and Interpretation of Summary Scores

The table below is used to calculate summary scores for FIRO-B.

<table>
<thead>
<tr>
<th></th>
<th>I (e)</th>
<th>C (w)</th>
<th>A (e)</th>
<th>sum(I + C + A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e</td>
<td>(e^I)</td>
<td>(e^C)</td>
<td>(e^A)</td>
<td>(e^I + e^C + e^A)</td>
</tr>
<tr>
<td>w</td>
<td>(w^I)</td>
<td>(w^C)</td>
<td>(w^A)</td>
<td>(w^I + w^C + w^A)</td>
</tr>
</tbody>
</table>

| sum (e + w) | \(e^I + w^I\) | \(e^C + w^C\) | \(e^A + w^A\) | \((e^I + w^I) + (e^C + w^C) + (e^A + w^A)\) |

| diff (+ or -) | \(e^I - w^I\) | \(e^C - w^C\) | \(e^A - w^A\) | \((e^I - w^I) + (e^C - w^C) + (e^A - w^A)\) |

Interpretation of Summary Scores

\(Sum^I\). High score means strong desire for contact with people regardless of who initiates it. Low score indicates preference for aloneness.
Sum C. High score means a desire for structure, a preference for giving and taking orders. Low score means low structure, a laissez-faire attitude with respect to authority, neither wanting to give nor to receive orders.

Sum A. High score indicates desire for a great deal of exchange of affection and warmth. Low score means a preference for more personal distance from people and more impersonal, business-like relationships.

Sum e. High score means active initiation of behavior toward others. Low score indicates little desire to initiate behavior toward people.

Sum w. High score means you want other people to initiate behavior toward you. Low score signifies a desire to have other people not initiate behavior toward you.

Sum. High score means a preference for a great deal of interaction with people, in all areas. Low score indicates a desire to have little contact with people, a desire to be more alone and uninvolved.

dI. High score indicates a preference for initiating inclusion behavior rather than for receiving it. You want to do the inviting much more than to be invited. Low score means the opposite: you would rather be the guest than the host.

dC. High score indicates a person who prefers to give orders rather than to take them. Low score person prefers to follow orders rather than to give them.

dA. High score means preference for initiating affection over receiving it. Low score means a larger desire for receiving affection than for giving it.

d. High score means a strong preference for taking the initiative in any human relating regardless of the area of the relationship. Low score means strong preference for waiting for other people to take the initiative toward you, whether it be contact, control, or affection.
REFERENCES

1 Statement by Nakama, Henry, retired educational officer, personal interview, Honolulu, Hawaii, September 10, 1981.

2 Statement by Ikeda, Kazuo, retired educational officer, personal interview, Honolulu, Hawaii, February 2, 1983.

3 Statement by Ohashi, Edward, educational officer, personal interview, Honolulu, Hawaii, March 10, 1983.

4 Statement by Otoshi, Morris, educational officer, personal interview, Honolulu, Hawaii, March 10, 1983.


7 Statement by Oliviera, Francis, retired educational officer, personal interview, Honolulu, Hawaii, March 9, 1983.

8 Statement by Ito, Takao, educational officer, personal interview, Honolulu, Hawaii, March 10, 1983.

9 Statement by Nakama, Henry, retired educational officer, personal interview, Honolulu, Hawaii, September 10, 1981.

10 Statement by Ikeda, Kazuo, retired educational officer, personal interview, Honolulu, Hawaii, February 2, 1983.

11 Statement by Ohashi, Edward, educational officer, personal interview, Honolulu, Hawaii, March 10, 1983.

12 Statement by Pang, Morris, university professor, personal interview, Honolulu, Hawaii, March 9, 1983.

13 Statement by Nakama, Henry, retired educational officer, personal interview, Honolulu, Hawaii, September 10, 1981.
14 Statement by Ohashi, Edward, educational officer, personal interview, Honolulu, Hawaii, March 10, 1983.

15 Statement by Ikeda, Kazuo, retired educational officer, personal interview, Honolulu, Hawaii, February 2, 1983.

16 Savard, op. cit., p. 9.

17 Savard, op. cit., p. 9.


22 Statement by Chang, Thomas, university professor, personal interview, Honolulu, Hawaii, March 10, 1983.


24 Savard, op. cit., p. 3.


26 Ibid., 40 pages.


29 Ibid., p. 156.
30 Ibid., pp. 40-72; 150-165.
31 Ibid., pp. 101-111.
33 Ibid., pp. 123-124.
35 Hoy, op. cit., p. 25.
36 Hoy, op. cit., pp. 18-27.
37 Hoy, op. cit., p. 28.
38 Halpin, op. cit., pp. 40-72; 150-165.
39 Hoy, op. cit., p. 25.
40 Hoy, op. cit., p. 37.
41 Hoy, op. cit., pp. 36-37.
42 Hoy, op. cit., p. 38.
43 Hoy, op. cit., p. 40.
45 Hoy, op. cit., pp. 36-46.
46 Hoy, op. cit., p. 41.
47 Hoy, op. cit., p. 41.
48 Hoy, op. cit., pp. 36-37.
49 Hoy, op. cit., p. 41.


Hoy, op. cit., p. 44.

Hoy, op. cit., p. 45.

Owens, op. cit., pp. 7-8; 56-60.

Owens, op. cit., p. 57.


Ibid., pp. 62-65.


Hoy, op. cit., pp. 120-123; 176-184.


71 Ibid., p. 23.

72 Ibid., p. 14.

73 Ibid., p. 25.


80 Rogers, op. cit., p. 39.


82 Ibid., pp. 24-29.


87 Myers, op. cit., p. 27.


104 Ibid., pp. 14-16.


108 Ibid., pp. 100-105.


115 Hall, Jay, and Martha Williams, Management of Motive Index, (Conroe, Texas: Teleometrics International, 1973), seven pages, sixty item inventory.

116 Jacoby, Jacob, and James R. Terborg, Managerial Philosophies Scale (Conroe, Texas: Teleometrics International, 1975), two pages, thirty-six item inventory.


120 Hall, op. cit., pp. 7-10.

121 Hall, op. cit., pp. 11-13.


123 Hall, Jay, Teleometrics: Products for Achievement a manual on tests and inventories, Woodlands, Texas, p. 4.

124 Buros, op. cit., p. 1180.


127 Buros, op. cit., p. 1180.

128 Ibid., p. 1180.

129 Hall, Jay, Teleometrics; Products for Achievement, a manual on tests and inventories, Woodlands, Texas, p. 8.

130 Owens, op. cit., pp. 24-25.

131 Buros, op. cit., p. 1180.


133 Buros, op. cit., p. 1180.


135 Hall, op. cit., p. 8.


144 Ibid., pp. 8-10.

