AN EXPLORATORY INVESTIGATION OF THE INTERRELATIONSHIPS AMONG THE PRIMARY ELEMENTS WITHIN THE REWARDS SYSTEM, POSITION REQUIREMENTS AND POSITION SATISFACTIONS FOR FACULTY IN SIX COLLEGES OF EDUCATION IN MICHIGAN

> Thesis for the Degree of Ph. D. MICHIGAN STATE UNIVERSITY PAUL CLAYTON SHANK 1968

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thesis entitled

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ABSTRACT

AN EXPLORATORY INVESTIGATION OF THE INTERRELATIONSHIPS AMONG THE PRIMARY ELEMENTS WITHIN THE REWARDS SYSTEM, POSITION REQUIREMENTS AND POSITION SATISFACTIONS FOR FACULTY IN SIX COLLEGES OF EDUCATION IN MICHIGAN

by Paul Clayton Shank

The study was intended as an exploratory investigation of the interrelationships of faculty personal and professional characteristics, rewards system, position requirements, and position satisfactions. The general purposes of the study can be categorized into two groups: first, to identify and illuminate relationships among aspects of faculty life critical to the improvement of administration of higher education, and second, to suggest in detail how the study, its model, methodology, and findings might be useful in future research of college problems in such related problem areas as faculty turnover, faculty morale, faculty attraction and retention, and faculty productivity.

Specific purposes of the study were to examine four aspects of faculty life. These were: one, the relative importance attached by faculty members to specific rewards system elements; two, the position requirements of these faculty members, their assignments, and the extent to which the faculty members liked or disliked their respective assignments; three, the levels of satisfaction derived by these faculty members from their position requirements; and four, the extent to which interrelationships may be demonstrated to exist among specific elements inherent in the position satisfactions, the rewards system, the position requirements, and faculty personal and professional characteristics.

Methodology of the Study

The sample included all faculty members appointed to the staff of the colleges of education in six selected State supported universities in Michigan for the 1966-1967, academic year. Usable questionnaires were received from 70.5 per cent of the study population. The questionnaire consisted of four parts: (A) a summary of personal and professional characteristics, (B) a list of work-load assignments on which each respondent indicated the percentage of time devoted to each, and the degree to which he liked or disliked each of the assignments, (C) a list of elements of importance to faculty members as a part of the university rewards system with the level of importance indicated by the respondents, and (D) a list of elements satisfying to faculty members with the level of satisfaction derived from each element indicated by the respondents. Application of a test of reliability

to a random sample of 30 completed questionnaires produced an internal consistency reliability score of .85 on part C, rewards system, and .82 on part D, position satisfactions. Intercorrelation matrices were examined and an elementary factor analysis technique employed to identify clusters, or factors, of elements within and among the four categories contained in the questionnaire. Descriptive data for comparison by major portion of workload, academic rank, length of tenure, sex, age, and institutions from which the respondents obtained their degrees was presented in tabular form and analyzed.

Findings of the Study

Faculty members in this study tended to stereotype their responses in groups as administrators, teachers, and researchers. Each of these types persists through these several analyses: respondents grouped according to academic rank held, length of tenure in a particular institution, major portion of work-load, "home" versus "other" university, or by institution served.

The types of faculty members were identified by the relationships of personal and professional characteristics, the level of importance attached to rewards system items, and/or the degree of satisfaction derived from position satisfactions. These types tend to be grouped according to the respondents' position requirements. The number of respondents who indicated research as the greatest portion of their work-load indicated researchers to be a distinct type. Teachers and administrators also were identifiable groups of respondents. Each of the three types tends to have a distinct pattern of likes and dislikes regarding their minor position requirements. Each type has a distinct pattern of important rewards and sources of satisfaction.

In addition to these three clearly identifiable types of faculty members, a significant marginal group is evident. These are faculty members who either have multiple work-load assignments or whose interrelationships of satisfactions, rewards, or personal and professional characteristics are inconsistent with any type otherwise identified.

In addition to the identification of three types of faculty members, another interesting finding of this study is: the degree of "like" or "dislike" expressed by respondents concerning the advisement of students. A generally low regard for this position requirement is consistent for all groups of respondents. It is generally low regardless of these variables: major portion of workload, selected personal and professional characteristics, and institution served. AN EXPLORATORY INVESTIGATION OF THE INTERRELATIONSHIPS AMONG THE PRIMARY ELEMENTS WITHIN THE REWARDS SYSTEM, POSITION REQUIREMENTS AND POSITION SATISFACTIONS FOR FACULTY IN SIX COLLEGES OF EDUCATION IN MICHIGAN

Ву

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CHAPTER I

NATURE AND SCOPE OF THE STUDY

Recent research that treats college and university faculty problems of attraction and retention, faculty work-loads, quality of teaching, faculty productivity, faculty morale, and mobility of college faculty thus far has been limited to the broader aspects of the problems studied. This limitation has pointed to the need for an investigation of the interrelationships of important considerations such as: faculty position requirements, faculty rewards systems, and faculty position satisfactions. Therefore, an investigation of interrelationships of these categories is considered to be both appropriate and timely.

Research concerning college faculties largely has focused on the above problems. Each problem has been examined in isolation of the other, thereby providing limited information. In this study, four aspects of faculty life were examined. These were: personal and professional characteristics, rewards system, position requirements, and position satisfactions. Moreover, the four conditions of faculty life were examined one in relation to the other. By so doing, the investigator hoped

to identify and illuminate some possible means for improving administration of higher education.

The Specific Purposes

A study was designed to examine elements of faculty personal and professional characteristics, rewards system, position requirements, and position satisfactions in selected Michigan colleges. Further, the study was designed to examine four aspects of the problem. These were:

- 1. The relative importance attached by faculty members to specific rewards system elements.
- 2. The position requirements of these faculty members, their assignments, and the extent to which the faculty members liked or disliked their respective assignments.
- The levels of satisfaction derived by these faculty members from their position requirements.
- 4. The extent to which interrelationships may be demonstrated to exist among specific elements inherent in the position satisfactions, the rewards system, the position requirements, and faculty personal and professional characteristics.

On the basis of the investigation, it was further intended to suggest in detail how the study, its model, methodology, and findings might be useful in future

research of college faculty problems in such related problem areas as faculty turnover, faculty morale, faculty attraction and retention, faculty productivity, and administration in higher education.

A Rationale for the Study

Solutions to faculty problems increasingly have become urgent in recent years. The need to find solutions has been made urgent by rapidly rising enrollments, a highly competitive market for academic personnel, the expansion of useful knowledge, and an ever increasing concern by faculty with the administration of colleges and universities.

Recruiting and retaining qualified faculty is a persistent and compelling problem in higher education. Earlier research in higher education administration illuminates certain aspects of the problem. Research results, however, are as yet unclear.

In a study of attraction and retention at the University of Minnesota, for example, Stecklein and Lathrop¹ reported that prospective faculty varied in their receptivity to University rewards. Also, they reported that position satisfactions--apart from the rewards system

¹John E. Stecklein and Robert L. Lathrop, <u>Faculty</u> <u>Attraction and Retention, Factors Affecting Faculty</u> <u>Mobility at the University of Minnesota</u> (Minneapolis: Bureau of Institutional Research, University of Minnesota, 1960).

--was an observable even critical factor in retention of faculty once recruited.

Unfortunately, this study--and related studies by Marshall² and Cammack³--fail to differentiate among factors that may be critical to faculty decisions to accept and/or retain employment with a university. Moreover, they do not differentiate completely among faculty members by type, as for example: administrators, researchers, and teachers.

Statement of the Problem

To differentiate among factors affecting faculty decisions to accept and/or retain employment in a university, two basic problems were examined. These were:

- 1. To what extent, if any, are factors of rewards, position satisfactions, position requirements, and personal and professional characteristics critical to the choice of faculty members?
- 2. How do faculty members whose present university assignments differ--as do those of administrators, teachers, and researchers--react to these factors?

²H. D. Marshall, <u>The Mobility of College Faculties</u> (New York: Pageant Press, Inc., 1964).

³E. F. Cammack, "A Study of Factors Related to Mobility and Faculty Productivity and Achievement at Michigan State University--A Follow-Up Study (unpublished Ed.D. dissertation, Dept. of Education, Michigan State University, 1964).

To examine the problem, a study was designed that would illuminate the reactions of selected faculty members--grouped by principal work assignment as administrators, researchers, and teachers--on each major factor and among the major factors. The study was conducted in six State supported colleges of education in Michigan during the academic year 1966-1967. Five principles were examined in the study. These were:

- Elements within the position requirement or work-load assignment are related within themselves and to similar elements in the rewards system and position satisfactions.
- 2. Elements within the rewards system are related within themselves and are also related to similar elements in the position satisfactions and the work-load assignment.
- 3. Elements within the position satisfactions category are related within themselves and are also related to similar elements in the work-load assignment and rewards system.
- 4. The relationships described above are consistent among differing faculty position requirements within a particular college of education.
- 5. The relationships described above are not consistent in sub-populations of

a college faculty that are delineated by age, academic rank, years of service in a college or university position, and other selected personal and professional characteristics.



Rewards System

The model served as a construct about which each of the stated principles was investigated. The extent of the interrelationships between position requirements or work-load assignment and position satisfactions and rewards system was sought.

Definition of Terms

In subsequent sections of this thesis certain terms are used that require specific definition. These are: 1. <u>Faculty</u> will mean those academic members who were appointed to the university staff for the 1966-1967 academic year and whose center of operation was on or from the main campus of their respective university. Further limitations are: only faculty from the colleges of education who served on full-time appointment, and who held rank at the level or instructor or above are included.

2. <u>Position requirements</u> and <u>work-load assignment</u> will be used interchangeably throughout the study. Position requirements will refer to those duties and services agreed upon by the faculty member for which the university pays him a salary and other considerations. Included in this category may be teaching, student advisement, research, community service, administration, and others.

3. <u>Rewards system</u> is defined to be those concrete considerations which are usually included in a professional services contract, or are understood by "gentleman's agreement." These may include: salary, monetary fringe benefits, research facilities, academic rank, physical facilities, the specification of duties and responsibilities or lack thereof, staff and clerical services, and others.

4. <u>Position satisfactions</u> are defined as any benefit pleasing to the faculty member, either tangible or intangible, which is a consequence, official or unofficial, of the position incumbency. These may include

both "internal" and "external" benefits of a pleasing nature. They may include: reputation of the university; reputation of the department; congeniality of associates; living conditions; cultural and recreational facilities; personal contacts with the administrative personnel; the caliber of students; title or academic rank; monetary fringe benefits; geographic location, and others.

<u>Internal</u> position satisfactions are those benefits that are pleasing and accrue to the faculty member primarily while in the performance of duties or service.

External position satisfactions are those benefits that are pleasing, but accure to the faculty member primarily outside of working hours and not in the service of the university.

Limitations of the Study

The limitations of questionnaire studies are well understood by the writer and these limitations in this study are acknowledged. However, it was deemed advisable at the outset to subject the study to these limitations as a more expedient choice than the use of the interview technique. Faculty members, who traditionally espouse the principle of intellectual integrity, could be expected to exercise judgment and acceptable standards of objectivity in their responses to the items included on the questionnaire. Although the questionnaire was responded

to anonymously, the personal and professional information such as academic rank, age, length of tenure and assignment were sufficient to determine that the 70 per cent who did respond were an adequate cross-section of the total professional population. The study may also reflect certain characteristics of the faculty which were true at the time this study was made, but may have changed considerably since. Characteristics of the academic market place and the social milieu of academe may also change in the intervening years and this would be reflected in any subsequent population studied. Hence, the possibility of bias must be considered whenever inferences are made.

A further limitation of the study is the recognized confusion of "rewards" and "satisfactions" by some respondents. To minimize this possibility, a pre-test using the interview technique was carried out before the final draft of the questionnaire was printed. A concise definition of the relevant terms was included on each appropriate page of the questionnaire. The specific procedures used in the administration of the questionnaire will be elaborated in another chapter.

Although studies of attraction and retention, mobility, morale, and productivity of faculty in higher education are referred to, and in fact, are the basis for this study, no attempt to study these faculty problems

was made. This study deals with such problems only as they relate to the problem of investigating the relationships of similar elements in the faculty position requirements, rewards system and position satisfactions.

Overview

The purposes of this first chapter have been to develop a rationale for the study, to present the problem and the principles to be investigated, and to appraise the reader of the significance, definitions, study population, and limitations of the study. Chapter II is a presentation of the central findings of this research and conclusions based on these findings. Chapter III is a description of the study population; a presentation, with the rationale, of the questionnaire developed for this study; and a statement of the type of statistical analyses used in the study. Chapter IV is a discussion of the descriptive data with comparisons presented intabular form. References are made to the central findings and conclusions. Chapter V is a further presentation and analyses of collected data and their relevance to the central findings and conclusions. Chapter VI is a summary of the data chapters, the questions, and the five princi-Chapter VII includes suggestions for future reples. search and commentary regarding the implications of this study.

CHAPTER II

THE CENTRAL FINDINGS: SIGNIFICANCE FOR ADMINISTRATION IN HIGHER EDUCATION

The central findings and their significance for administration in higher education are presented in this chapter. This is not the usual order of chapters found in most doctoral theses. It was felt, however, to be the most appropriate presentation of this research. The reasons are: (1) this study is by design a hypothesis generating type of research, (2) the methodology and data chapters are lengthy, and (3) the findings are clear and concise.

The reader is invited, even encouraged, to read beyond the concise presentation of the findings in this chapter. A study of the tables, their analysis in Chapter IV, and the statistical data in Chapter V, is considered essential for an in-depth understanding of the central findings as presented here.

Central Findings

Faculty members in this study tended to stereotype their responses in groups as administrators, teachers, and researchers. Each of these types persists through

these several analyses: respondents grouped according to academic rank held, length of tenure in a particular institution, major portion of work-load, "home versus "other" university, or by institution served.

The types of faculty members were identified by the relationships of personal and professional characteristics, the level of importance attached to rewards system items, and/or the degree of satisfaction derived from position satisfactions. These types tend to be grouped according to the respondents' position requirements.

The number of respondents who indicated research as the greatest portion of their work-load was relatively small. However, analysis, the same as employed for respondents with a different work-load assignment, indicated researchers to be a distinct type. Teachers and administrators also were identifiable groups of respondents. Each of the three types tend to have a distinct pattern of likes and dislikes regarding their minor position requirements. Each type has a distinct pattern of important rewards, and sources of satisfaction.¹

In addition to these three clearly identifiable types of faculty members a significant marginal group is evident. These are faculty members who either have

¹Supervisors of student teachers are a significant group of respondents for whom a separate analysis was made. Their responses corresponded to those of teachers.

multiple work-load assignments, or whose interrelationships of satisfactions, rewards, or personal and professional characteristics are inconsistent with any type otherwise identified.

In addition to the identification of three types of faculty members another interesting finding of this study is: the degree of "like" or "dislike" expressed by respondents concerning the advisement of students. A generally low regard for this position requirement is consistent for all groups of respondents. It is generally low regardless of these variables: major portion of workload, selected personal and professional characteristics, and institution served.

Significance for Administration in Higher Education

Selection, Assignment and Promotion

Those concerned with the selection, assignment and promotion of faculty in any university comparable to the universities included in this study may well consider the above findings to be important. It would be to the advantage of the institution and the individual faculty member, if selection were to take into account the following: the faculty member's patterns of "like-dislike" toward position requirements, and attitudes concerning rewards offered and sources of satisfaction. The multiple item factors identified in this research depict a difference in relationships among and between the above mentioned categories based upon easily discernable personal and professional characteristics. These relationships tend to identify faculty members by type.

Certainly, in promotion of faculty, and usually in assignment, and often in selection, the individual under consideration has personal and professional characteristics known to the institution. Moreover, his likes and dislikes regarding work-load are known. If a faculty member is one of the three types identifiable, based on the findings of this study, then perhaps a more meaningful decision can be reached when selection, assignment or promotion are considered.

Personnel Policies

Any uniformity in personnel policies will probably discriminate against at least one significant minority group within the institution. The more definitive and rigid the policies, the more likely they will discriminate against one segment of the faculty. The axiomatic plea for broad policies which allow for flexibility of administrative procedures might more logically be a plea for different policies, and a broadening of these different policies; one set of policies for each of the identifiable faculty types.

Faculty Development

The nature of the position held and the types of individuals enticed to the position, tend to reinforce one another. It may well be that there is a built-in resistance to change. This will require: innovative administrative practices; new concepts of personnel policies; and more appropriate procedures for selection, assignment, and promotion of faculty members. Development of faculty, individually or as a department, will necessitate these suggested changes within colleges of education.

Student Advisement

None of the respondents included in this study indicated a major portion of their work-load devoted to student advisement. In most instances it was indicated as a relatively small portion. No distinction was made between advisement of graduate students and advisement of undergraduate students. It is probable that student advisement was, at the time of this study, an addendum to the faculty work-load, rather than a small, but central, portion thereof. However, students are the first business of the institution. It would seem appropriate therefore, to manipulate the rewards system in such manner as to emphasize the advisement of students; make it a more positive portion of a faculty member's work-load.

The Research Instrument

Not the least of the important results of this research was the development and use of an original instrument for the investigation of faculty position requirements, rewards systems, position satisfactions, and personal and professional characteristics. The rationale for the instrument, its administration, and reliability are presented in detail in subsequent chapters of this study. It can be reported that the instrument was adequate for this study, and can be used in further research.

Suggestions for further use of this instrument, and continued investigation of faculty problems in higher education are found in Chapter VII.

CHAPTER III

PROCEDURES USED IN THE COLLECTION AND ANALYSIS OF THE DATA

The purposes of this chapter are to outline the procedures used in the collection and treatment of data. A description of the study population and of the instruments used, the methods of data collection, and the procedures for data analysis will be discussed in order.

Description of the Study Population

The population included all full-time faculty members in the college of education at Michigan State University and at five other selected universities in the State of Michigan. Questionnaires were sent to faculty members who were appointed to the university staff in the college of education for the 1966-1967 academic year. Their center of operation was on or from the main campus of their respective universities. Only faculty members with academic rank of instructor or above were asked to respond.

Of the 547 members to whom questionnaires were sent, 386 returned usable responses: 70.5 per cent of the total. Information regarding the number at each academic

rank level, average age, average length of tenure, and number in each type of assignment was obtained from each institution that contributed to the study population. Similar information was reported in the personal and professional characteristics section of the questionnaire. Based on these characteristics, a comparison, by proportions, was made of the respondents and the total study population. The respondents were determined to be a representative sample of the total population to whom the questionnaires were sent. All responses were made anonymously.

The Questionnaire

The questionnaire used in this study was designed to illuminate the extent to which five principles characterize elements within and among three major categories: position requirements, rewards systems, and position satisfactions. These principles as previously stated in Chapter I, are as follows:

- Elements within the position requirements of work-load assignment are related within themselves and to similar elements in the rewards system and position satisfactions.
- Elements within the rewards system are related within themselves and are also related to similar elements in the position satisfactions and the work-load assignment.

- 3. Elements within the position satisfactions category are related within themselves and are also related to similar elements in the work-load assignment and rewards system.
- 4. The relationships described above are not consistent among differing faculty position requirements within a particular college of education.
- 5. The relationships described above are not consistent in sub-populations of a college faculty that are delineated by age, academic rank, years of service in a college or university position, and other selected personal and professional characteristics.

It was necessary that data related to each of the three major categories under investigation be secured. Moreover, the reactions of the faculty to the elements within each category were essential. Hence, the questionnaire consisted of four parts:

- A. A summary of personal and professional characteristics related to the professional positions of the population for the academic year covered in the study.
- B. A list of work-load assignments for each faculty member. This was designed to obtain the percentage of time devoted to each of the professional duties or services performed. The

degree to which the faculty members "like" or "dislike" each of the duties or services indicated as part of their work-load was sought by requesting them to check each on a six-point scale.

- C. A list of elements assumed to be of varying importance to faculty members as a part of the university rewards system. The level of importance attached to each of the elements listed was sought by requesting that each element be appropriately checked on a six-point scale.
- D. A checklist of elements assumed to be satisfying to faculty members at varying levels. The level of satisfaction derived from each of the elements by faculty members was sought by requesting that each element be checked on a six-point scale.

A blank marked "other" was provided on each of the last three sections of the questionnaire to induce responses not covered by the items listed. Less than 5 per cent of the respondents listed elements as "other." In most cases elements listed as "other" were restatements of elements already included. There were no new elements listed by more than two respondents.

A first draft of the questionnaire was prepared and discussed with members of the doctoral advisory committee. Refinements were made and copies of the questionnaire distributed to selected department chairmen within the college of education at Michigan State University. Further refinements were made as the result of their suggestions. Sample copies were handed to selected department chairmen and deans of the colleges of education at five other universities in the study population. This was accomplished during interviews with each of these persons. Final revisions and refinements were made after considering suggestions offered during these interviews.

Parts three and four of the questionnaire were examined through the application of a reliability test developed by Hoyt.¹ The test serves "to determine the reliability of the average ratings or the total score on the test, that is, maximum likelihood estimate of reliability."

The formula used was

¹Cyril Hoyt, "Test Reliability Estimated by Analysis of Variance," <u>Psychometrika</u>, VI (June, 1941), pp. 153-160.

$$r_{tt} = \frac{s_{R}^{2} - s_{E}^{2}}{s_{R}^{2}}$$

where

 S_{R}^{2} = variance of subjects scores S_{F}^{2} = variance due to error.

Application of the test to a random sample of 30 completed questionnaires produced an internal consistency reliability score of .85 on Part C, rewards system; and .82 on Part D, position satisfactions. These scores clearly suggest that there exists a commonality in the ratings in each of the instruments. Since the purposes of this study require only that it is possible to establish interrelationships among the elements from one category to another, the value of r_{tt} is considered to be adequate.

Collection of Data

The primary source of data for the study was the questionnaire as described above. Questionnaires were mailed to 547 faculty members comprising the study population. Of the total group, 386, or 70.5 per cent, returned usable responses. A brief cover letter mailed with each questionnaire explained the general nature of the study. The instructions stated that all responses were to be anonymous. Follow-up letters were sent to all persons to whom the original letter and questionnaire had been mailed, encouraging them to return the questionnaire.

Letters also were sent to the deans and department chairmen outlining the objectives of the study and soliciting their support in encouraging faculty members to participate in the study.

Current faculty rosters were obtained from the deans of the colleges of education in each of the six universities. This was accomplished during an interview in which the purposes of the study, a third draft of the instrument, and the personal and professional characteristics of their particular faculties were discussed.

Procedure for Data Analysis





Rewards System

suggests that the analysis of the data be such as to permit an investigation of the relationships among
faculty position requirements, position satisfactions and rewards system. The construct implies the use of comparison of several groups of elements within and among the categories. Further, the use of statistical techniques to demonstrate the extent of relation of these elements.

The analysis lends itself conveniently to division into two separate sections: first, the descriptive data and comparison, second, an analysis of data through the use of appropriate statistical techniques.

The following questions are answered descriptively through the use of tables:

- 1. Do faculty members who spend the major portion of their time in the performance of one particular duty or service "like" this part of their workload more or less than the other duties which they perform?
- 2. What are the major work-load responsibilities (60 per cent or more of the faculty member's time) for level of academic rank, salary, and years experience in the present university?
- 3. How do the ratings for selected elements in the rewards system compare by age, academic rank, and sex?
- 4. How important are the rewards of academic rank, salary, and appropriateness of duties assigned to faculty members serving in an institution

that granted one or more of their degrees? How important are these same rewards to other faculty members serving in the same university? How do the responses of these two sub-populations compare?

- 5. Which of the selected "internal" position satisfactions are most satisfying to each of the following sub-populations: instructors, assistant professors, associate professors, full professors? Which of the satisfactions are most satisfying to sub-populations comprised of faculty members with differing major position requirements?
- 6. Which of the selected "external" position satisfactions are most satisfying to each of the following sub-populations: instructors, assistant professors, associate professors, full professors? Which of the satisfactions are most satisfying to sub-populations comprised of faculty members with differing major position requirements?

The intercorrelation matrix was examined and an elementary factor analysis technique devised by McQuitty² was employed. The major matrix examined is as follows:

²Louis L. McQuitty, "Elementary Factor Analysis," <u>Psychological Reports</u>, IX (1961), pp. 71-78.



A = personal and professional characteristics of

the respondents

C = rewards system items

D = position satisfactions items.

Elementary factor analysis can be performed on a relatively large matrix of intercorrelations to classify people or tests (including items) into clusters and to assess the extent to which each person or test is representative of its cluster.3

Intercorrelations of each of the 46 items comprising

A, C, and D, form the large matrix of intercorrelations from which clusters were identified.

Three sub-matrices were formed by sorting on workload items as:



³<u>Ibid.</u>, p. 18.

B_a = Administrators

 B_s = Supervisors of Student Teachers

B_t = Professors

- A = Personal and professional characteristics
 - of the respondents
- C = Rewards system items
- D = Position satisfaction items.

Six sub-matrices were formed by sorting by university as:



U₁ = University one U₂ = University two U₃ = University three U₄ = University four U₅ = University five U₆ = University six A = Personal and professional characteristics of the respondents

- C = Rewards system items
- D = Position satisfactions items.

Two sub-matrices were formed by sorting by "home" university and other university. "Home" university includes all respondents serving in a university from which they received one or more degrees. Other university refers to all other respondents not in the above stated category. The matrices were formed as:



- H = "Home" university
- 0 = Other university
- A = Personal and professional characteristics of the respondents
- C = Rewards system items
- D = Position satisfactions items.

Summary

This chapter has considered the study population, the instruments used, method of data collection and the methods for analysis of the data. In the following chapter are presented the descriptive data and comparisons of items within the three categories; position requirements, position satisfactions and rewards system, plus selected personal and professional characteristics.

CHAPTER IV

DESCRIPTIVE DATA AND COMPARISONS

Descriptive data concerning the study population are summarized in this chapter. Also included are comparisons of various sub-groups of the study population with respect to work-load, age, academic rank, sex and institutions from which the respondents obtained their degrees. Respondents were asked to supply pertinent data relative to their personal and professional characteristics in Part A of the questionnaire. Several comparisons have been made between items contained in Parts A and B of the questionnaire. In these sections of the questionnaire, the categorical or nominal data are contained. Other comparisons are of ratings for selected rewards system items and position satisfactions items within one or more of the categories described above.

Simple averages and percentages were thought to be sufficient to show comparisons of items selected from Parts A and B of the questionnaire. The data in these two sections do not meet the assumptions of more revealing statistical tests. The comparisons of ratings from the rewards system and position satisfactions categories

are presented in order to answer the questions set forth in Chapter III. Correlations revealing a relationship, or lack thereof, among items from Parts C and D of the questionnaire are presented in Chapter V.

Major Work-load Responsibilities: Degree of "Like" or "Dislike"

Data concerning major work-load are summarized in Table 3.1. Inspection reveals that faculty members who devote 70 per cent or more of their time to one specific duty or service "like" this portion of their work-load more than the other duties and services which they perform.

Of the 145 respondents whose major position requirements demand at least 70 per cent of their time be spent in the performance of one specific duty or service, three important modes are discernable:

- Twenty-four faculty members expressed a greater "like" for the minor portion of their workload.
- Forty-seven faculty members expressed equal "like" of both major and minor portions of their work-load.
- 3. Seventy-four faculty members expressed a greater degree of "dislike" for the minor portion of their work-load than for the major portion of work-load.

Of the 145 respondents reported in Table 3.1, only 15 rated their major portion of work-load below 5, on the six-point "like"-"dislike" scale. The same 15 respondents rated the minor portion of their work-load at 5, or above. One hundred twenty-one of the 145 respondents expressed as great or greater degree of "like" for their major portion of work-load as for their minor portion of work-load.

Major Work-load Responsibility for Levels of Academic Rank, Salary Range and Years Experience in the Present University

In Table 3.2 are the major portion of work-load for 198 faculty members included in this study. Major portion of work-load in Table 3.2 includes any particular duty or service as indicated in Part B of the questionnaire requiring at least 60 per cent of a faculty member's time. In the table faculty members' responses are grouped in each work-load category by academic rank, salary range, and number of years experience in their present university. Also included in the table are data descriptive of faculty members' work-load, whether or not they have an overload.

An analysis of the data in Table 3.2 describes the faculty members included as follows:

1. Most faculty members whose primary responsibility is teaching hold academic rank of

assistant professor. Nearly as many hold academic rank of professor.

- 2. More than half of the faculty members for whom 60 per cent of their position requirement is teaching are in the middle salary range--\$10,000 to \$15,999.
- 3. The largest number of faculty members who are primarily teachers have been in their present university less than five years. But, nearly as many have been in their present university more than thirteen years.
- 4. Of the 117 faculty members indicating teaching as their major portion of work-load, 48 indicated they were on an overload basis.
- 5. Of those faculty members who listed their major portion of work-load as research, instructors were most numerous.
- 6. Of those faculty members indicating research as their major work-load responsibility, over one-half earned less than \$10,000 per year.
- 7. Over one-half of the faculty members in research indicated they had been in their present university less than five years.
- 8. Of the ll faculty members in research, only three indicated they were on an overload basis.

- 9. Approximately one-half of the faculty members reporting in Table 3.2, for whom administration is their primary work-load responsibility, hold academic rank as professor. Nearly as many are associate professors.
- 10. Nearly two-thirds of the administrators shown in Table 3.2 indicated their salary as in excess of \$16,000 per year.
- 11. More than one-half of the administrators indicated they had been in their present university 13 years or more.
- 12. Seventeen of the 37 faculty members whose major portion of work-load is administration indicated they were on an overload basis.
- 13. Included in the table are 32 faculty members whose primary position requirement is supervision of student teachers, 14 served as instructors and 13 as assistant professors.
- 14. Two-thirds of the supervisors of student teachers indicated their salary as less than \$10,000 per year.
- 15. Nearly two-thirds of the supervisors of student teachers have been at their present university less than five years.
- 16. Of the 32 faculty members whose major portion of work-load is supervision of student teachers, nine indicated they were on an overload basis.

One associate professor who indicated his major portion of work-load as community assignment is included in the table.

It is of interest to note that 78 of the 198 faculty members included in Table 3.2, indicated they were on an overload basis.¹

Selected Rewards System Items

A distribution of levels of importance for rewards system items of academic rank, salary, monetary fringe benefits, and reputation of the university are shown in Table 3.3 and in Tables 3.3-1 through 3.3-6, inclusively. Included in these tables are comparisons of faculty by academic rank, sex, and age. The same information for each of the universities included in the study population is included in Tables 3.3-1 through 3.3-6.

Based on information included in Table 3.3, academic rank is considered to be more important as a reward the higher the academic rank held by the faculty member. Full

¹No definition of overload was given in Part B of the questionnaire. Respondents indicated the per cent of total work-load devoted to each duty or service performed. Those with a total of 115 per cent or more were arbitrarily assumed to have an overload. This may not be a valid assumption. There is often disagreement among faculty from department to department within a college of education as to what constitutes a full load. The same may be true from institution to institution.

In cases where an overload does, in fact, exist, it may result from an enticement, at additional salary, of faculty to serve off-campus.

professors generally regard academic rank as a more important reward than do associate or assistant professors. The mode for all faculty members included in the table is 5. The median level of importance attached to academic rank is 5, except for instructors for whom it is 4.

Salary is regarded by the total study population as a more important reward than is academic rank. Those faculty members with academic rank of associate professor attach the most importance to salary as a reward. Instructors attach least importance to salary as a reward. The mode for each level of academic rank is 5, except for assistant professors the mode is 6. The median level of importance attached to salary as a reward is 5 at each level of academic rank.

Faculty members attach less importance to monetary fringe benefits than to salary as a reward. Monetary fringe benefits are considered at about the same level of importance as academic rank in the rewards system. The medians and modes are the same for both of these rewards system items.

The reputation of the university is as important as salary in the rewards system as shown in Table 3.3. The median for faculty members at all academic rank levels is 5. Faculty members with academic rank of full professor indicated they attach greater importance to

the reputation of the university than faculty members at the lower academic rank levels. Moreover, full professors attach greater importance to the reputation of the university as a reward than to any of the other three rewards system items shown in Table 3.3.

A comparison of the importance attached by men and women to the rewards system items included in Table 3.3 has been made. Little difference in the importance attached to these items can be attributed to the differences in sex. It is worthy of note, however, that of the 16 faculty members who expressed "little or no importance" with regard to the reputation of the university as a reward, none are women. The rewards of academic rank, salary and monetary fringe benefits are about as important to women as to men faculty members.

Analysis of Table 3.3 with regard to age reveals several patterns in the degree of importance attached to the rewards system items of academic rank, salary, monetary fringe benefits and the reputation of the university by each age group. Faculty members in the lower three age groups, including ages 21-35, tend to attach less importance to academic rank as a reward than do faculty members in the middle age groups, including ages 36-55. Faculty members in the higher age groups, including ages 50-over 70, tend to attach more importance to the reward of academic rank than do the middle aged group.

Faculty members below age 40 attach slightly less importance to salary as a reward than older faculty members. However, the degree of importance attached to salary as a reward is consistently high among all age levels of faculty members.

Monetary fringe benefits are shown to be about as important as academic rank. The age group 36-55 tends to attach slightly more importance to monetary fringe benefits than do either younger or older groups.

The degree of importance attached to the reputation of the university as a rewards system item is highest among the older faculty members. The degree of importance attached to the reputation of the university was found to be consistently high throughout the entire faculty, however.

Table 3.3 included only four of the 12 rewards system items contained in Part C of the questionnaire. It was felt that a comparison based on the three presonal and professional characteristics, academic rank, sex and age, would be sufficiently revealing.

Tables 3.3.1 through 3.3.6 include a distribution of degrees of importance attached to selected rewards system items for each individual university included in the study population. They contain, by university, the same information as Table 3.3, which is a summary of all the universities included in the study.

Universities 1, 2, and 3 are relatively large institutions and have large colleges of education. Universities 4, 5, and 6 are smaller in total size and have smaller colleges of education.

The following three aspects, through comparison, are most notable in reflecting the differences and similarities in size and academic stature of the universities included in this study with regard to the four rewards system items depicted in the tables:

- 1. Salary as a reward is regarded with nearly the same degree of importance by faculty members in all six colleges of education. At university 3 the distribution of ratings of the degree of importance attached to salary as a reward was bi-modal.
- Academic rank is regarded as a less important reward by faculty members at universities 4, and
 than by the total study population.
- 3. The degree of importance attached to reputation of the university as a reward by faculty members in universities 1 and 2, was greater than for faculty members in any of the other four universities included in this study. The mode at both universities 1 and 2 was 6, as compared with 5 for the total of all respondents included in Table 3.3.

A perusal of Tables 3.3.1 through 3.3.6 also reveals the differences in number of respondents, their age ranges, sex, and the number of faculty in each university at each level of academic rank.

A Comparison of Faculty Members in Their "Home" Universities with Faculty Members in Other Universities: Three Selected Rewards System Items

Included in Table 3.4 are responses by faculty members who are presently serving in a university from which they earned one or more of their degrees. For comparison, faculty members who are presently serving in a university other than one from which they have taken a degree are also depicted. The bases for comparison used in Table 3.4 are the levels of importance attached to three selected rewards system items generally assumed to be of primary importance to faculty members.

Of the 386 respondents in the study population, 141 were serving in a university from which they had earned one or more degrees.

The percentage of respondents at "other" universities who indicated the highest level of importance attached to academic rank as a reward is larger than the percentage of faculty members at "home" universities who indicated this level of importance for this item. Conversely, the percentage of respondents who indicated they attach no importance to academic rank as a reward is greater for

"home" university faculty members than for other university faculty members. There is less difference in the percentages of respondents of "home" and other universities who indicated one of the middle four levels of importance attached to academic rank as a reward.

Respondents from other universities indicated salary as of great importance as a reward 8 per cent more often than respondents in "home" universities. There was very little difference in the percentages of "home" and other university faculty members indicating salary as a reward at the lower five levels of importance.

Relatively little difference exist centages of faculty members serving in "home" and other universities for any of the six levels of importance attached to appropriateness of duties assigned as shown in Table 3.4.

Internal Position Satisfactions: Four Levels of Academic Rank and Four Position Requirement Categories

Included in Table 3.5 are the levels of satisfaction derived from seven "internal" position satisfaction items. The responses of professors, associate professors, assistant professors, and instructors are analyzed according to the major position requirement responsibilities of each respondent. For the data included in Table 3.5, at least 50 per cent of the faculty

member's time is devoted to a particular duty or service as indicated in Part B of the questionnaire.

Research emphasis as a position satisfaction is the least satisfying of the position satisfaction items shown in Table 3.5. This is true at all academic rank levels. Except for those whose major position requirement is research, it is also true for all major position requirement categories shown.

The position satisfaction most satisfying at all levels of academic rank and for all work-load categories is congeniality of associates. This pattern is least pronounced for those primarily engaged in research.

The administration of the department tends to be a source of satisfaction to most faculty members depicted in Table 3.5. Some exceptions are found in the groups of assistant professors and full professors who are primarily engaged in teaching.

Opportunity for professional growth and advancement is a strong source of position satisfaction for all position requirement categories and all professorial levels shown in the table. This position satisfaction is nearly as strong a source of satisfaction as is congeniality of associates. Of the 195 respondents included in Table 3.5, only 26 indicated less than average amount of satisfaction derived from opportunity for professional growth and advancement.

The caliber of students is indicated as a source of satisfaction at either of the top two levels, 5 or 6, by approximately one-half of the 195 faculty members included in Table 3.5. It is indicated at either of the lower two levels by only four faculty members. Of those whose primary work-load responsibility is teaching, only 12 indicated below average satisfaction with the caliber of students. Whereas, 105 teachers indicated above average levels of satisfaction derived from the caliber of students at their respective universities.

The reputation of the department as a source of satisfaction ranges from "no satisfaction" to "great satisfaction" at all levels of academic rank. This is also true for most position requirement categories shown. The exception to this pattern was found to be in the administrators category. No administrator indicated the lowest possible level of satisfaction derived from the reputation of the department. The reputation of the department was more often a source of above average level of satisfaction. However, it is not of the strength of congeniality of associates or opportunity for professional growth and advancement as a source of satisfaction.

It should be noted in Table 3.5, that of the faculty members primarily engaged in supervision of student teachers none held academic rank of associate professor. All other major position requirement cagegories include faculty members at each of the levels of academic rank.

External Position Satisfactions for All Levels of Academic Rank and Major Portion of Work-load

The levels of satisfaction derived from three "external" position satisfaction items are depicted in Table 3.6. Professors, associate professors, assistant professors, and instructors are separated according to their major portion of work-load. Unlike responses in Table 3.5, the major portion of work-load in Table 3.6 includes all respondents included in the study. The major portion of work-load is determined to be whichever duty or service requires the largest amount of the faculty member's time as indicated in Part B of the questionnaire.

It is to be noted that several position requirements do not, in some cases, require the largest per cent of any faculty member's time. This does not mean these duties or services are less or more important than other duties and services performed by faculty. It is simply an indication of the spread of such services as student advising or consulting for the university. Few faculty members spend the major portion of their time in such services.

Analysis of the data contained in Table 3.6 shows that living conditions are a greater source of satisfaction for professors than for instructors. Associate and assistant professors indicate similar levels of satisfaction derived from living conditions. Full professors derive somewhat more satisfaction from cultural and

recreational advantages than do faculty members at lower academic ranks.

Administrators are shown to derive a greater level of satisfaction from each of the external position satisfactions, shown in Table 3.6, than faculty members in any of the other work-load categories. Only one of 56 administrators indicated "no satisfaction" derived from the three items shown.

Those whose major portion of work-load is research indicated generally lower levels of satisfaction derived from each of the position satisfactions items shown in Table 3.6.

Geographic location is the least relevant of the three position satisfactions shown. The mode is at level 4, for all academic ranks and for most major portion of work-load categories.

It can be determined from studying Table 3.6 that, except for the highest academic rank and the position requirement of administrator, little difference is indicated in the levels of satisfaction derived from the external position satisfactions described in the Table. Table 3.6 includes responses from faculty members from all of the six universities in the study population.

Tables 3.6.1 through 3.6.6 include the same information, by university, as is included in Table 3.6. A perusal of these additional six tables reveals the

following notable observations concerning the levels of satisfaction derived from three position satisfaction items at each of six different universities:

- Faculty members at university 4 tend to be more satisfied with the external sources of position satisfaction than are faculty members at the other five universities. Of 168 indications of satisfaction level, only 13 were less than above average.
- 2. Faculty members at university 5 whose primary responsibility is teaching indicated less satisfaction derived from these three position satisfactions than did teachers in the other five universities. The same is true when compared with faculty members at university 5, with different work-load responsibilities.
- 3. Except at university 4, full professors indicated a greater level of satisfaction derived from each of the items in Tables 3.6.1 through 3.6.6 than did faculty members at lower levels of academic rank.
- 4. Faculty members at university 6 indicated a greater level of satisfaction derived from geographic location than did faculty members at the other five universities.

Nuances were discerned in the satisfaction levels derived from each of the external position satisfactions included in Tables 3.6 and 3.6.1 through 3.6.6. It is of interest, however, that two of the external position satisfactions are generally as satisfying at one university as another.

Summary

Data analyzed in this chapter have shown that faculty members who devote 70 per cent or more of their time to one specific duty or service "like" this major portion of their work-load more than the other duties and services which they perform. Administrators were found to be at the higher levels of academic rank, to be more highly paid and to have remained in their present university more than 13 years. Faculty members serving in universities from which they have received one or more of their degrees were found to differ only slightly from other faculty members in the degree of importance attached to salary, academic rank, and appropriateness of duties assigned. Forty per cent of those faculty members who spend at least one-half of their time in the performance of one specific duty or service indicated they were on an overload basis. More importance is attached to salary than to any other item in the rewards system. The higher the academic rank held by a faculty member, the more

importance attached to salary as a reward. The most satisfying position satisfaction item was found to be congeniality of associates. Research emphasis in the particular university served was indicated as least important of the internal position satisfactions. Full professors tend to be the most satisfied members of the faculty with regard to the external position satisfactions item, living conditions. Administrators were shown to derive a greater level of satisfaction from each of the external position satisfactions, living conditions, cultural and recreational advantages and geographic location, than faculty members in any other work-load category.

Bias of the respondents must be considered when generalizations are made from these findings. The tendency to higher salaries, greater numbers of faculty members on an overload basis, and more rapid advancement in academic rank may be partially due to the fact that the more energetic faculty members were more willing to respond to the questionnaire.

CHAPTER V

ANALYSIS OF DATA

The statistical analysis of data is presented in this chapter. It was the purpose of this study to generate, rather than test, hypotheses based on five principles stated in Chapter I, and six questions asked in Chapter II. An elaboration beyond the results of the analyses was presented in The Central Findings in Chapter II, and Implications and Remarks, Chapter VI. The intercorrelation matrices were designed to seek information. Also to seek support for, or refutation of, the principles stated in Chapter I, and the questions posed in Chapter II. The presentations of factors in this chapter are relevant to those principles and questions. The CDC 3600 computer was used to compute the correlation coefficients.

Factors were computed from the intercorrelation matrices by application of a factor analysis technique by McQuitty.¹ Factor loadings were computed for each of the factors shown. The strongest component in each factor is indicated with an asterisk. Underlined components indicate the correlation coefficient is significant at the

¹McQuitty, <u>Psychological Reports</u>, pp. 71-78.

.005 level. An arrow indicates the direction of highest correlation of one component with another. Significance levels of correlation coefficients were obtained from Table VI, <u>Experimental Design in Psychological Research</u>.² Factors are presented in order of relative strength. Factor #1 is strongest, #2 is next and so on through the last or weakest factor in the matrix.

For clarity of presentation all factor components have been identified as follows:

 \triangle = Rewards system items.

 \bigcirc = Position satisfaction items.

The descriptions of items included within each of the categories are indicated numerically as follows:

Rewards System Items: Δ

- 2 = Importance attached to academic rank.
- 3 = Importance attached to salary.
- 4 = Importance attached to monetary fringe benefits.
- 5 = Importance attached to the adequacy of office and research facilities.
- 6 = Importance attached to adequacy of classroom facilities.

²Allen E. Edwards, <u>Experimental Design in Psycho-</u> <u>logical Research</u> (New York: Holt, Rinehart and Winston, 1960).

- 7 = Importance attached to appropriateness of duties assigned.
- 8 = Importance attached to clerical and staff
 services.
- 9 = Importance attached to the opportunity
 to carry on research.
- 10 = Importance attached to time allowed for writing.
- 12 = Importance attached to reputation of university.
- Position Satisfactions Items: ()
 - 13 = Satisfaction derived from research
 emphasis at the university.
 - 14 = Satisfaction derived from the physical
 facilities.
 - 15 = Satisfaction derived from teaching.
 - 16 = Satisfaction derived from congeniality of associates.
 - 17 = Satisfaction derived from personal contacts
 with the Head of the Department.
 - 18 = Satisfaction derived from opportunities
 for growth and advancement.
 - 19 = Satisfaction derived from the reputation
 of the department.

- 20 = Satisfaction derived from the reputation of the university.
- 21 = Satisfaction derived from academic rank
 held.
- 22 = Satisfaction derived from the caliber of students.
- 23 = Satisfaction derived from the administration of the department.
- 24 = Satisfaction derived from current salary.
- 25 = Satisfaction derived from monetary fringe benefits.
- 26 = Satisfaction derived from living conditions.
- 27 = Satisfaction derived from cultural and recreational advantages in the area.
- 28 = Satisfaction derived from the geographic location.

Personal and Professional Characteristics:

- 30 = Academic rank held.
- 31 = Experience in higher education.
- 32 = Length of tenure at present university.
- 33 = Administrative experience.
- 34 = Experience in elementary and secondary education.
- 35 = Experience in school administration.
- 42 = Age of faculty member.
- 45 = Salary of faculty member.

All Respondents Matrix: Seven Factors

Ratings on 46 items by the 386 respondents in the study population make up the first matrix. The items are included in Parts A, C, and D of the questionnaire. They are items in the rewards system, position satisfactions, and personal and professional characteristics categories.

> #1 Personal and Professional Characteristics

30

The strongest factor found in the matrix of all items for all respondents is comprised of only two personal and professional characteristics; academic rank and salary. It is clear that, in the institutions included in the study population, faculty salaries are dependent primarily on level of academic rank.

#2 Personal and Professional Characteristics



Age is the most heavily loaded component of this age-experience-tenure factor. All components within the factor were measured in years.

#3 Rewards System Category



The third strongest factor in this matrix reveals that faculty members tend to attach the same degree of importance to the reputation of their departments as they attach to the reputation of the university in which they serve.



Factor #4 is made up of internal position satisfactions items. A relationship exists between the satisfaction experienced from the department and university reputations, teaching, the caliber of students, and the opportunities for professional growth and advancement. This factor, although fourth, is a strong factor in which all correlation coefficients are significant at the .005 level.

#5 Position Satisfactions



Factor five is a relationship of three additional internal position satisfactions items. The strength of this factor is somewhat less than the larger factor comprised of internal position satisfactions above. #6 Rewards System Items and One Position Satisfaction Item



Factor six is the only factor in this matrix that includes components from more than one category. One item from the position satisfactions category is brought in with two rewards system items. Faculty tend to attach similar degrees of importance to research and writing opportunities, and to gain satisfaction from the overall emphasis on research at their particular universities.

> #7 Two Rewards System Items

Factor seven in this matrix, the least powerful, is comprised of just two rewards system items. Salary and monetary fringe benefits are both a part of the tangible system of payments for services rendered.

Summary

Factors depicted above do not necessarily indicate which items are of greatest concern to faculty members. They simply reveal which items, or components have the highest degree of relationship. Factors two and four reveal a cluster of five items each; one within the position satisfactions category and one within the personal and professional characteristics category. It is of interest to note that only in factor six are items from more than one category combined in a factor.

An investigation of the interrelationships of the elements inherent within the rewards system, position satisfactions, position requirements, and selected personal and professional characteristics was made for three groups of the respondents. Factors were computed for each group to facilitate comparison. Thirty administrators, 21 supervisors of student teachers and 92 teachers comprise the three groups. Included are faculty members who indicated 70 per cent or more of their time devoted to one of these three position requirements.

The matrices and factors for administrators, supervisors of student teachers and teachers are presented in order.

Administrators Matrix: Eight Factors

Ratings on 46 items by 30 faculty members whose primary work-load responsibility is administration make up this matrix.

> #1 Rewards System and Position Satisfactions Categories



The strongest factor in the matrix is made up of non-monetary rewards and internal position satisfactions. One component in this factor was found to have a correlation coefficient not significant at the .005 level; 22 correlated with 19 at the .01 level.

#2 Items from all Categories Are Included



Factor 2, is comprised of items from each of the categories; rewards system, position satisfactions and personal and professional characteristics. Component 5, adequacy of office and research facilities is the most heavily loaded in the factor. All components have correlation coefficients significant at the .005 level, except 34, at the .025 level and 7, at the .010 level.

#3 Position Satisfactions External



Factor three in the administrators matrix is comprised of two position satisfactions. There is a relationship between the importance administrators attach to their living conditions and the cultural and recreational advantages available to them.




All components of factor four are personal and professional characteristics related to the administrators. This factor pictures the experience-age-salary relationship of administrators. The correlation of 31 with 42, is significant at the .025 level. Salary received the greatest factor loading.

#5 Position Satisfactions



All components in this factor are position satisfactions. It is interesting to note the high relationship between external and internal position satisfactions; 17 and 28, for administrators.

#6 Position Satisfactions



Factor six is significant at the .005 level. A relationship exists between the satisfaction derived by administrator from these two internal position satis-factions items.

#7 Position Satisfactions

Factor seven indicates a significant relationship exists between research emphasis and teaching as position satisfactions for administrators. Most administrators included in this matrix are not involved significantly in teaching.

#8 Rewards System Position Satisfactions

Administrators tend to regard academic rank with corresponding degrees of importance and levels of satisfaction. These two components of factor #8 have a correlation coefficient significant at the .01 level.

Supervisors of Student Teachers Matrix: Seven Factors

Ratings on 46 items by 21 respondents who spend at least 70 per cent of their time in the supervision of student teachers comprise this matrix.

> #1 Personal and Professional Characteristics Position Satisfactions



Factor one in the supervisors of student teachers matrix is comprised of experience items and external position satisfactions items. All correlation coefficients are significant at the .005 level.

> #2 Rewards System Position Satisfactions



Component 20, reputation of the university, is the most heavily loaded in this factor.



Factor three includes components from each category. The relationship as pictured above for 21 supervisors of student teachers are all significant at the .005 level, except component 35, with component 11, is significant at the .025 level.

#4 Personal and Professional Characteristics Rewards System



Factor four depicts age-salary-academic rank characteristics, and one non-monetary rewards system item. All component correlation coefficients comprising factor four are significant at the .005 level.

> #5 Rewards System Position Satisfactions



Factor five contains both internal and external position satisfactions and one non-monetary rewards system factor. Components 7 and 26 have correlation coefficients significant at the .01 level.

#6 Rewards System



Factor six includes three non-monetary rewards for supervisors of student teachers. A relationship is depicted between the importance attached to office and research facilities, classroom facilities, and designated portion of the work-load assigned to writing.

#7 Internal Position Satisfactions



Factor seven is a strong cluster of non-monetary, internal position satisfactions. The correlation coefficient for components 13 with 14, is significant at the .01 level.

Summary

The factors depicted in the supervisors of student teachers matrix are all comprised of three or more components. Five of the seven factors contain items from more than one of the categories: rewards system, position satisfactions, and personal and professional characteristics.

Teachers Matrix: Eight Factors

Ratings on 46 items by 92 teachers are included in this matrix. Each of the respondents included devote at least 70 per cent of their time to teaching. Eight factors were computed from the correlation matrix.





The strongest factor in the teachers matrix is comprised of age-experience components. For the 92 teachers included, the relationship of age, total experience in higher education, and tenure in the present university have a stronger relationship than any other cluster of items.

#2 Personal and Professional Satisfactions



Factor two, like factor one, is comprised of three personal and professional characteristics. In this academic rank-experience-salary factor, the present salary is the most heavily loaded component.



Factors three and four, the next strongest two, are both made up of high correlations of the reputation of the department and the university. They are interesting for two reasons. First, the correlation between the reputation of the department and the reputation of the university as a source of satisfaction to teachers is higher than the same two elements' correlation is as a reward for services. Second, the strongest rewards system factor, number four, in the teachers matrix is non-monetary.

#5 Rewards System Personal and Professional Characteristics



Factor five consists of three rewards system components and one personal and professional characteristic. Component 34 was brought into the factor by a high negative correlation with component 9. The more experience at the elementary and secondary levels the faculty have had, the less importance they attach to opportunities to do research.

#6 Position Satisfactions

Factor six is a small cluster of non-monetary internal position satisfactions. The level of satisfaction derived from the administration of the department is the most heavily loaded component in the factor.

#7 Rewards System

Factor seven is a combination of two monetary rewards. Salary and academic rank are more often combined as a monetary rewards factor. For this group of 92 teachers, however, the salary-fringe benefits correlation is highest.

> #8 Rewards System Position Satisfactions



Factor eight reveals a strong relationship between academic rank as an important reward and academic rank as a source of satisfaction. Also, brought into the factor are position satisfactions; research emphasis and the caliber of students. The most heavily loaded component in the factor is academic rank as a source of satisfaction.

Summary

Three of the eight factors in the teachers' matrix include only two items. The strongest factor is comprised of personal and professional characteristics. Only two factors included items from more than one category. In each of the factors within this matrix all of the components have correlation coefficients significant at the .005 level.

A separate matrix for faculty members serving in a university from which they earned one or more of their degrees was formed. This matrix is referred to as the "home" matrix. All other respondents from the matrix herein referred to as "other." By comparing factors from the "home" matrix and "other" matrix answers can be sought for the questions regarding "home" faculty members.

The next two matrices presented will be "home" and "other" in order. The factors from each are presented.

"Home" Faculty Members Matrix: Eight Factors

Ratings on 46 items by the 141 respondents serving in a university from which they received one or more of their degrees make up the "home" matrix.



Factor one is an experience-age cluster of personal and professional characteristics. All components in the factor are, as indicated, significant at the .005 level. The number of years served in the present university is the most heavily loaded item in the factor.





Factor two is the academic rank-salary combination. It is to be expected that a high correlation would occur between these two items. Most universities tie their salary schedule to levels of academic rank. It is interesting to note that no other items were brought into this factor.

#3 Rewards System Position Satisfactions



Factor three is comprised of two items each included in the rewards system and position satisfactions categories. The reputation of the university as a reward and as a source of satisfaction are most highly correlated in the factor. The reputation of the department as a reward and as a source of satisfaction are brought into the factor by the corresponding items in the categories regarding the university's reputation.



Factor four consists of three external position satisfactions and one internal position satisfaction. Faculty members in the "home" university tend to derive the same level of satisfaction from their living conditions and the cultural and recreational advantages in the area.

> #5 Rewards System



Factor five is an academic rank-monetary rewards cluster. The loading in this factor is on salary.

#6 Position Satisfactions



Factor six is comprised of four internal position satisfactions; two of them monetary. Salary as a source

of satisfaction is the most heavily loaded item in the factor.

#7 Position Satisfactions



Factor seven is a cluster of three internal position satisfactions. All items are non-monetary in nature and regard relationships of faculty members with one another and the administrative faculty members.



Factor eight is comprised of items from all three Categories. The most heavily loaded item in the factor is the level of satisfaction derived from the emphasis upon research at the university. It is to be noted that the correlation of elementary and secondary teaching experience with satisfaction derived from the emphasis on research is a negative correlation; significant at the .005 level.

Summary

All except one of the factors depicted in the "home" faculty members matrix included more than two items. Five of the eight factors shown included four items. Only two factors included items from more than one category of the questionnaire. Only factor eight, the weakest shown, included items from the rewards system, position satisfactions, and personal and professional characteristics categories.

"Other" Faculty Members Matrix: Eight Factors

Two hundred forty-five faculty members serving in universities other than one from which they earned their degrees make up the "other" matrix.

> #1 Personal and Professional Characteristics



Factor one is an expected high correlation of academic rank and salary. It is not, however, necessarily expected that these two items would have the highest correlation in the entire matrix.





Factor two also consists solely of personal and professional characteristics. It is an age-experience factor in which experience in higher education is the heavily loaded component.

#3 Position Satisfactions



Factor three is a cluster of internal position satisfactions. For those respondents in the "other"

matrix, a strong relationship exists between the satisfactions derived from the reputation of the university and the reputation of the department, the physical facilities and the caliber of students.

#4 Rewards System

#5 Position Satisfactions



Factor #5, is comprised of seven items, all within the position satisfactions category. The factor loading is on 23, level of satisfaction derived from the administration of the department.

> #6 Rewards System Position Satisfactions

Factor #6, shows two rewards system items with a similar position satisfactions item drawn into the cluster. The respondents in this matrix tend to regard research opportunity and the opportunity to write with the same degree of importance.

#7 Rewards System Position Satisfactions



Rewards System

#8



Factors 7 and 8 each have two items. In factor 7 we find a strong relationship between academic rank as a reward and academic rank as a source of satisfaction.

Factor 8, the weakest in this matrix, shows a high correlation between two monetary rewards.

Summary

The "other" matrix produced eight factors, four of which contain only two items. Only two factors were comprised of more than three items: factor three, with four items, and factor five, with seven items. Both factors three and five depict meaningful clusters of position satisfactions items. The highest two correlations and strongest factors in the matrix are comprised of personal and professional characteristics.

Summary

Each of the six matrices presented in this chapter was examined by application of factor analysis. The factors, clusters of items within and among the rewards system, position satisfactions, and personal and professional characteristics, reveal the following significant relationships:

Of the 47 factors identified, 16 include only two items, 13 include three items, 11 include four items, and seven include more than four items.

Four of the six strongest factors in the matrices (i.e., the first factors in the matrix), are comprised of personal and professional characteristics and position satisfactions items, and the other, position satisfactions and personal and professional characteristics.

The administration matrix included more items within the eight factors than was the case for any of the other five matrices. This matrix also produced the largest number of items in a single factor--12.

Rewards system items were included in 20 of the factors identified. Position satisfactions items were included in 27 of the factors. Personal and professional characteristics items were included in 16 of the factors. Both the supervision of student teachers matrix and the "home" matrix produced seven out of eight factors that included more than two items.

Only three of the 47 factors included items from each of the rewards system, position satisfactions, and personal and professional characteristics categories. These three factors were produced by the supervision of student teachers, administration, and "home" matrices.

It must be reiterated: factors reveal relationships among items. These relationships are not necessarily indicators of the value of any item contained therein. Two items, either of which may be regarded by faculty members as having little importance as rewards, may have a significant correlation coefficient and be included in a strong factor.

An elaboration on the findings in Chapters IV and V was included in Chapter II, Central Findings and Conclusions.

CHAPTER VI

A SUMMARY: THE DATA, PRINCIPLES, AND QUESTIONS

Solutions to faculty problems have become increasingly urgent in the recent period of rapidly rising enrollments in colleges and universities and a highly competitive market for academic personnel. This study has been an attempt to clarify and point the direction to some of the unanswered questions which have resulted from other faculty studies. The purposes of this study were to investigate the relationships between faculty rewards systems, position satisfactions and position requirements. The population under study included Michigan State University's College of Education and selected other state universities in Michigan.

Five principles were advanced which were thought to provide a suitable basis for the investigation of relationships within and among the elements of faculty rewards systems, position satisfactions, position requirements, and numerous faculty personal and professional characteristics. It was also intended that these principles,

along with answers to six questions formulated, would serve as a basis from which one or more hypotheses might be generated.

In this chapter, three relevant comments are made. These are:

1. A summary of the data chapters.

2. Answers to the six questions formulated.

3. Support, refutation, or restatement of the five principles advanced.

Summary of Data Chapters

Faculty members who devote 70 per cent or more of their time to one specific duty or service like this portion of their work-load more than the other duties and services they perform.

Most faculty members whose primary responsibility is teaching hold academic rank of assistant professor or full professor. Of the 117 respondents primarily engaged in teaching, most were found to earn between \$10,000 and \$15,000 per year. Most of the teachers have either been in their present university less than five years or more than 13 years. Few have been in their present university between five and 13 years. The average age of teachers was found to be 44.

The internal position satisfactions most pleasing to teachers were found to be: congeniality of associates, an opportunity for professional growth and advancement,

the reputation of the university, and the caliber of students. External position satisfactions most pleasing to teachers were found to be living conditions, and cultural and recreational advantages.

An interrelationship of elements within and among the rewards system, position satisfactions, and the personal and professional characteristics of teachers was demonstrated through factor analysis. Clusters of personal and professional characteristics were strongest. These consisted of an experience-age factor, and an administrative experience-salary-academic rank factor. Clusters depicting a relationship of rewards system and position satisfaction items were also revealed. The degree of importance attached to salary and monetary fringe benefits as rewards were shown to be similar for teachers. Α similar relationship of the reputation of the university and the reputation of the department was also shown. Related elements within the position satisfactions for teachers were found to be the satisfaction derived from the administration of the department, opportunity for professional growth and advancement, and the teaching function. An interrelationship of the importance attached to academic rank as a reward, position satisfaction derived from academic rank, satisfaction derived from the emphasis on research at the university, and the satisfaction with the caliber of students was also shown to exist for teachers.

Thirty respondents reported that they devote the major portion of their time to administrative duties. The majority of these administrators hold academic rank as full professor or associate professor. Nearly twothirds of the administrators indicated their salary in excess of \$16,000 per year. More than one-half of the administrators have served in their present university more than 13 years. They average 48 years of age.

The internal position satisfactions most pleasing to administrators are: congeniality of associates, reputation of the department, and opportunity for growth and advancement. Each of the above position satisfactions was indicated as "very satisfying" by a larger proportion of administrators than any other group of respondents sorted according to position requirement. Administrators were also found to be the group deriving the most satisfaction from external position satisfactions. In order of greatest satisfaction derived, administrators indicated living conditions, cultural and recreational advantages, and geographic location as sources of satisfaction.

Factor analysis of a 46 item matrix for administrators revealed several clusters of relationships among the elements within the rewards system, position satisfactions, and certain personal and professional characteristics. The strongest factor for administrators included the rewards of the reputations of the department

and university, and the reputations of the department and university as sources of position satisfaction. Also included in this factor was the satisfaction derived from the caliber of students. The second factor depicted for administrators is the strongest in the six matrices subjected to factor analysis. A cluster of 12 items comprised of eight from the rewards system, three from the position satisfactions, and one of the personal and professional characteristics was revealed. The importance attached to the adequacy of office and research facilities was found to be the key item in this factor. A total of 34 items were included in the eight factors produced from the administrators matrix.

Most faculty members who devote the major portion of their time to the supervision of student teachers were found to hold academic rank of instructor or assistant professor. Two-thirds of the supervisors of student teachers earn less than \$10,000 per year, and have served in their present university less than five years.

Supervisors of student teachers tend to be less satisfied with the external position satisfactions than faculty members who devote most of their time to teaching.

Eight factors were computed from the matrix of supervisors for student teachers. The most powerful factor was composed of two personal and professional

characteristics and two position satisfactions. Experience in higher education correlated highly with years served in the present university. Satisfaction derived from the cultural and recreational advantages and the geographic location were included in the cluster. The second and fifth factors are comprised of rewards system and position satisfaction items. Factor three included items from each of the three categories. The rewards of the reputations of the department and the university, the position satisfaction of opportunity for professional growth and advancement, and the professional characteristic of experience at the elementary and secondary levels made up this cluster from the supervisors of student teachers matrix. Of interest is factor four. It includes the age-salary-academic rank characteristics with the non-monetary reward item of clerical and staff service.

The supervisors of student teachers matrix produced factors of different combinations and different strengths from the administrators or teachers matrices.

Of 198 respondents with 60 per cent or more of their time committed to a single position requirement, twofifths indicated they were on an overload basis. The criteria for determining faculty load is not consistent among the six universities included in this study. Moreover, in some instances a slight overload is

expected without monetary compensation. With reference to the respondents discussed above, an overload of at least 15 per cent was considered worthy of note. Faculty members primarily engaged in administration indicated they were on an overload basis oftener than did faculty members having other major work-load responsibilities.

A comparison of four rewards system items revealed some similarities and differences in the importance attached thereto. The greatest degree of importance is attached to academic rank as a reward by faculty members who have the highest level of academic rank. Salary is a more important reward to associate professors than to instructors. Faculty members attach less importance to monetary fringe benefits than to salary as a reward. Faculty members consider the reputation of the university to be a more important reward than salary. This is especially true for those with academic rank of full professor.

The only difference with regard to the above four rewards system items, for male or female faculty members, is in the importance attached to the reputation of the university. Consistently, women tend to regard this reward higher than do men. In all other considerations of these four rewards system items, sex matters little.

Salary is an important reward for all age groups. Monetary fringe benefits, however, tend to be given more

importance by faculty in the 36-55 age groups. Academic rank is a more important reward to older faculty members. Since this difference in importance for different age groups is not evidenced for salary, it is logical to assume that academic rank is a reward to faculty members apart from its tie to the salary schedule.

The most pronounced difference in the importance of one of these four rewards system items for particular age groups is the degree of importance attached to the reputation of the university. The older the faculty member, the more importance attached to the reputation of the university.

The importance attached to academic rank and salary as rewards was found to be less for faculty members serving in universities from which they received one or more of their degrees, than for other faculty members. Appropriateness of duties assigned was about as important a reward to the "home" faculty members as for other faculty members.

As reported in Chapter IV, factors were computed from intercorrelation matrices to discover which items cluster. All respondents serving in a university from which they received one or more of their degrees were included in one, and all other respondents were included in the other matrix. The results of this comparison are summarized as follows.

The reader must be cognizant at the outset of the limitations of comparing factors from one matrix with factors from another matrix. Factors are comprised of significant correlation coefficients between items. They do not imply value of the items, merely a relationship. From this point of reference a comparison of factors from separate matrices becomes meaningful. The purpose of the comparison is to visualize the differing patterns of item relationships of the respondents when they are grouped according to major position requirement, "home" or other university, or in aggregate.

The data described in Chapter IV reveal only one factor from the "home" matrix to be identical with a factor from the "other" matrix. Faculty members serving in a university from which they received one or more degrees revealed a very high relationship between their present salary and the academic rank they hold. The same was true for the group of all other respondents. This was also found to be true for these two groups combined into one large matrix. This relationship was the strongest in the matrix for the combined groups and for the group of "other" faculty members. It was the second strongest relationship in the "home" matrix. All other factors were different. The particular items included in the factors, the number of items in the factors, the extent of their relationships, and the interrelationships

among the three categories of items are different for each of these groups of respondents.

A summary of the resultant factors computed for all respondents and for three position requirement subgroups is analogous to the above comparison of factors from the "home" and "other" groups of respondents. These four matrices produced factors composed of items within each of the categories of items. Some factors reveal a relationship among items from two or all three of the categories; rewards system, position satisfactions, and personal and professional characteristics. Few of the factors among the four matrices are identical.

Indications of satisfaction derived from seven internal position satisfactions were tabulated from responses by 195 faculty members. These 195 faculty members had differing major position requirement responsibilities. They also held differing levels of academic rank. The criteria for determining major position requirement was that 50 per cent or more of the faculty members' time be devoted to one specific duty or service.

From Table 3.5, it was determined that congeniality of associates is the source of greatest internal position satisfaction at all levels of academic rank and for all position requirement categories. The opportunity for professional growth and advancement is also an important source of great position satisfaction for all levels of

academic rank and all position requirement categories. It is nearly as satisfying as congeniality of associates.

The administration of the department is a positive source of position satisfaction, but with some exceptions. Those whose position requirement is primarily teaching indicated less satisfaction derived from the administration of the department than did the other position requirement groups. These exceptions were most often full professors or assistant professors.

Satisfaction derived from the caliber of students was found to be especially great for teachers. For other position requirement groups and for the four levels of academic rank, it is a positive source of satisfaction, but not of great satisfaction.

The reputation of the department is a source of greater satisfaction for administrators than for other position requirement groups. It is more often than not, a source of above average position satisfaction for all levels of academic rank, and position requirement categories.

Emphasis on research at the university is the least satisfying of the items examined in Table 3.5. The exceptions are those faculty members primarily engaged in research.

A summary of the findings in regards to external position satisfactions depicted in Table 3.6, includes three important modes.

One, geographic location is less satisfying than living conditions or cultural and recreational advantages. Living conditions are a greater source of satisfaction for professors than for faculty members at lower levels of academic rank. Administrators derive more satisfaction from living conditions and cultural and recreational advantages than any other position requirement group.

Those whose primary position requirement is research indicated generally low levels of satisfaction derived from each of these three external position satisfaction items.

The Questions

Based on the findings of this study, the questions posed in Chapter III are herein answered within the limitations of the data collected and the method of analysis employed. The questions in order:

> 1. Do faculty members who spend the major portion of their time in the performance of one particular duty or service "like" this part of their work-load more or less than the other duties which they perform?

It can be concluded that faculty members who devote 70 per cent or more of their time to one particular duty or service like this portion of their position requirements more than the other duties and services which they perform. In cases where the opposite is true, one could expect the faculty member to seek a change in position requirement. The data reveals there are other rewards to which faculty members attach greater importance than appropriateness of duties assigned. Thus, while most faculty members have favorable position assignments and like their major portion of work-load best, it is not unusual to find exceptions.

2. What are the major work-load responsibilities (60 per cent or more of the faculty member's time) for level of academic rank, salary, and years experience in the present university?

Most faculty members primarily engaged in teaching hold academic rank of assistant professor or full professor. Most administrators hold academic rank of associate or full professor. Those engaged in research are somewhat younger and hold academic rank of assistant professor or associate professor. Supervisors of student teachers constituted the only other sizable group. The majority of them hold academic rank of instructor and assistant professor.

Teachers and administrators were of varying ages. Young administrators are less frequent, however. Supervisors of student teachers tend to be younger. Ages for those primarily engaged in research include the younger two-thirds of the age ranges.

Salary level and major position requirement fall into more distinct patterns than the above mentioned age range and level of academic rank. Administrators as a group are receiving a larger salary than teachers. Teachers are paid slightly more than researchers; as a group, supervisors of student teachers are the poorest paid.

Professional preparation and experience of the faculty members are as important as academic rank, salary and age. The position requirements of faculty can be assumed to depend to a great extent upon these two important considerations. Salary and academic rank are then dependent upon the combination of these and position requirements.

> 3. How do the ratings for selected factors in the rewards system compare by age, academic rank, and sex?

From the summary of findings it may be noted that salary is consistently important as a reward for most faculty members. This is also true of academic rank since these two items are tied together in most university salary schedules. The reputation of the university was indicated as the most important reward for faculty members; especially the older members. It would seem that many faculty members are willing to "sacrifice" academic rank, salary, and appropriateness

of duties assigned to serve in an institution they hold in high esteem. For purposes of attraction and retention of qualified faculty, the reward of the reputation of the university is the most difficult to alter. The other rewards can be manipulated more easily.

> 4. Are the rewards of academic rank, salary, and appropriateness of duties assigned more or less importanct to faculty members serving in an institution that granted one or more of their degrees than to other faculty members serving in the same institution?

Academic rank and salary are somewhat less important to faculty serving in the "home" university than to other faculty members. There did not seem to be much difference between the groups as far as the appropriateness of duties assigned was concerned. It appears that another reward has been discovered: serving in the "home" university. Although none of the respondents listed this reward in the space provided on the questionnaire for additional items, they may have attached the importance to the reputation of the university. It is the tendency for most scholars to regard the institutions where they obtained their degrees as one of the best. A further consideration is location. Most people attend a college or university reasonably near their home or at least in the home state. When a faculty member returns to serve in his home

university he is often returning to more than just the home university.

5. Which of selected "internal" position satisfactions factors are most satisfying by academic rank and major portion of work-load?

The source of greatest internal position satisfaction was found to be congeniality of associates. Also important as sources of internal position satisfaction are the opportunity for professional growth and advancement, the administration of the department, and the caliber of students in the university. Although these latter three sources of satisfaction vary according to academic rank and age or major portion of position requirement, one may assume that the interaction of human beings can offer great satisfaction and pleasure in a university setting.

Faculty members derive more satisfaction from these internal position satisfactions, especially the congeniality of associates, than from those of a monetary nature.

> 6. Which of the "external" position satisfactions factors are most satisfying by academic rank and major portion of work-load?

The respondents in this study indicated living conditions as the most satisfying of the external position satisfactions. Cultural and recreational
advantages was next and geographic location last. Where and how faculty members and their families live is important. One may assume that the greater level of satisfaction derived from these conditions and locations, the easier it is for them to sacrifice the inevitable shortcomings of certain internal position satisfactions. This may explain in part why institutions without established reputations or perhaps high salaries still can attract faculty. The institution has to have "something" to offer. If it is fortunate to be located in a favorable area with abundant cultural and recreational advantages and plenty of excellent dwellings available, certain advantages accrue to the institution in recruiting faculty.

The Five Principles

Conclusions warranting support, rejection, or revision of the five principles stated in Chapter I are as follows:

> Items within the position requirements or work-load assignment are related within themselves and to similar items in the rewards system and position satisfactions.

The above discussion of major portion of position requirements with regard to the extent of "like" or "dislike" and the data in Table 3.1 support the

principle of relationship between the separate duties (items) and services performed by faculty members. The summary of data contained in the matrices of three major portions of work-load, supervision of student teachers, administrators, and teachers supports the principle of relationship between position requirements and rewards system items and position satisfactions items. Further, it was demonstrated that a relationship exists between position requirements and certain personal and professional characteristics. The factors identified in the analysis of these three matrices were not identical in item relationship or strength of item relationship. The diversity of factors and relationships of items within factors is therefore attributed to the difference in position requirements. Thus, principle number one is supported.

> 2. Items within the rewards system are related within themselves and are also related to similar items in the position satisfactions and the work-load assignment.

Each of the six matrices examined produced factors comprised of items within the rewards system. The different matrices produced different factors. In all six matrices, factors were computed which depict a relationship of rewards system items within themselves, with position satisfaction items, and with personal

and professional characteristics. These findings support the principle stated above.

3. Items within the position satisfactions category are related within themselves and are also related to similar items in the work-load assignment and rewards system.

The discussion of principles one and two above apply to principle three. In addition to these findings, it may be further concluded that the relationships of position satisfactions within themselves and among the rewards system items is more extensive than the relationships relevant to principles one or two. Thus, principle three is supported conclusively.

> 4. The relationships described above are not consistent among differing faculty position requirements within a particular college of education.

The examination of the major portion of work-load matrices, supervisors of student teachers and administrators and teachers, provided examples of greatly differing factors. The production of differing relationships among and within the items included in the categories of rewards system, position satisfactions, and personal and professional characteristics supports the negative principle stated above. One may conclude that relationships described in the first three

principles are not consistent among differing position requirements within a particular college of education. Tables 3.3.1 through 3.3.6 and Tables 3.6.1 through 3.6.6 depict the importance attached to selected rewards system items, and the levels of satisfaction derived from selected position satisfactions items for the respondents from each of the six universities included in the study population. The range of importance attached to rewards and levels of satisfaction derived from position satisfactions within each of the universities lends further support to principle four.

> 5. The relationships described above are not consistent by age range, academic rank, years of service in a college or university position, and other selected personal and professional characteristics.

It has already been established through the analysis of the descriptive data that supervisors of student teachers have different personal and professional characteristics than administrators. The most notable differences are: age, salary, academic rank, length of tenure in the present university, and experience in higher education. Adding further support to the principle are: the relationships of items within factors, the composition of the factors, and the diversity of factors from one matrix to the other. The analysis supports the conclusion that relationships of items within and among the rewards system, position satisfactions and position requirements will be different for various age groups, levels of academic rank, or years of experience for faculty members.

In this chapter the findings of the data chapters have been summarized. The six questions formulated in Chapter III have been answered in light of this summary. The five principles advanced in Chapter I were supported with reference to this summary.

Chapter VI, therefore, serves as a detailed summary of the research, and the basis for the Central Findings presented in Chapter II of this thesis.

CHAPTER VII

IMPLICATIONS FOR FURTHER RESEARCH

This chapter includes other lines of investigation suggested by this study. The answers sought through this research, by design, form the basis for continued investigation of problems related to faculty in higher education. The Summary, five principles, and six questions in Chapter VI, and the Central Findings in Chapter II, serve to generate the following suggested avenues of inquiry.

Persistence

A longitudinal study based on the methodology used in this study should be conducted. The purpose of the research would be to establish whether or not the three types identified in this study persist over a period of time. If they do, the significance for administration in higher education will be the more urgent.

The Marginal People

The respondents in this study who could not be identified as belonging to one of the three types of faculty members, need further study. Do widely

diversified position requirements indicate these faculty members are ambivalent in their professional goals? Or, are these faculty members merely experiencing a "stage" in their professional development?

Are these marginal people more flexible and thus more receptive to new ideas, practices, and a broad base of responsibilities? Are they less, or more, efficient in their tasks than faculty members who fit a particular type?

Change Behavior

Which of the three types identified act as change agents within their colleges? Which of the types is most resistant to change? Are the "marginal" people more, or less, important as change agents than those faculty members who can be identified with one of the types?

If administrators are regarded as implementors of change, who might they most wisely rely on to effect desired changes?

Student Advisement

Why do a disproportionate number of faculty members tend to regard the advisement of students negatively? The Central Findings of this research reinforce the need for an investigation of the following hypothesis:

> The reasons why faculty members regard student advisement negatively are external of the actual process of advising students.

Support for, or refutation of, this hypothesis will suggest which variables within the college structure could be manipulated for maximum positive change.

Summary

Most meaningful research is based upon extensive past research. It seeks answers to a delimited number of relevant questions. It opens the path to further research. The most valuable contribution of this research would be its use for further investigation into one or more of the above faculty problems in higher education. BIBLIOGRAPHY

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APPENDIX

MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48823

College of Education Erickson Hall

April 7, 1967

I am well aware that faculty members are asked to assist in innumerable doctoral studies and that this request could easily be ignored. However, your assistance is respectfully requested for this study which is the culmination of two years of research aimed at a better understanding of faculty needs.

The study deals with faculty rewards systems, position requirements and position satisfactions. The study population includes faculty members of the schools of education of six universities in Michigan.

The questionnaire is brief and can be completed quickly and easily. In order to keep all returns anonymous, please do not indicate your name or university.

Copies of the abstract will be available to respondents through the dean or department chairman of your school of education.

I will be most appreciative of your help in completing this study and, as I will have no other way of thanking you personally for your assistance, please accept my sincere gratitude at this time.

Sincerely,

Paul C. Shank Research Assistant 401-A, Erickson Hall

A STUDY OF WORK-LOAD ASSIGNMENTS, REWARDS SYSTEM AND POSITION SATISFACTIONS OF FACULTY IN HIGHER EDUCATION IN MICHIGAN

by . . . PAUL C. SHANK 401-A, Erickson Hall College of Education Michigan State University East Lansing, Michigan

TOTAL WORK-LOAD ASSIGNMENT*

- <u>A</u> Please indicate the proportion of your total university assignment to each of the following. Make your estimate to the nearest 10 percent. If you are on an over-load basis, your total will add to more than 100%.
- <u>B</u> Then, indicate the degree to which you like or dislike each of your assigned duties by placing an "x" in the appropriate box to the right.

	- A -				- B -		
Duties and Services Performed	Percent of Time	I Dislike this part of my work- load very much					I Like this part of my work- load very much
		(0)	(1)	(2)	(3)	(4)	(5)
Teaching							
Student Advisement							
Research							
Administration							
Community Assignments							
Community Service	s						
Supervision of Student teachers interns or other	, s						
Consulting Servic for the Universi	es ty						
Consulting Servic on a private, fe basis	es						
)ther(specify)							

This duty may not be considered by the university as an official part of your work-load. If applicable in your case, assign it a percent of time and rate it as you have your other duties, even though it may be entirely butside your expected work-load assignment.

Work-load Assignment--A Definition:

Those duties and services agreed to by the faculty member for which the university pays him a salary and other considerations.

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REWARDS SYSTEM*

How important are the conditions of employment surrounding the position you now hold? Listed below are several possible sources of professional rewards that might make your position attractive. For each of the items indicated, please check in the appropriate box to the right the level of importance you assign to the item.

Rewards	No Import	Little Import	Below Average	Above Average	Quite Important	Great Importance
Academic Rank						
Salary						
Monetary Fringe Benefits						
Adequacy of Office and Research Facilities						
Adequacy of Class- room Facilities						
Appropriateness of Duties Assigned						
Clerical and Staff Service						
Opportunity to do the Research I Want to do						
Assigned Time for Writing						
Reputation of the Department						
Reputation of the University						□ ·
)ther(specify)						

LEVEL OF IMPORTANCE

*Rewards System--A Definition: The concrete considerations which are contracted for, or "understood" by the faculty member and the employing institution.

POSITION SATISFACTIONS*

Please check each of the following possible sources of position satisfaction according to the degree of satisfaction you derive. These factors may include any source of satisfaction that you derive as a consequence of your position. There are both tangible and intangible factors listed. Please feel free to add other factors.

DEGREE OF	SATI	[SFA	CT.	Ι	ON
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Source of Satisfaction	None	Little	Below Average	Above Average	Considerable	Great
Research Emphasis						
Physical Facilities						
Teaching						
Congeniality of Associates						
Personal Contacts with Head of Department						
Opportunity for Profes- sional Growth and Advancement						
Reputation of the Department						
Reputation of the University						
Academic Rank						
Caliber of Students						
Administration of Department						
Salary						
Monetary Fringe Benefits						
Living Conditions						
Cultural and Recrea- tional Advantages						
Geographic Location						
)ther(specify)						
)ther(specify)						

Position Satisfactions:

Any benefit satisfying to the faculty member, either tangible or intangible, which is a consequence, official or unofficial, of the position encumberance.

GENERAL INFORMATION

Please respond to each of the simple questions given below. It is not necessary for you to identify yourself or your university in any way as you answer the questions. Most questions can be completed by placing a check mark in the appropriate space to the right.

- 1. What is the name of the department (or area of emphasis) in the school of education in which you work? _______ (Examples: elementary education, secondary education, administration, special education, counseling and guidance, or other.)
- 2. What is your academic rank? instructor __; assistant professor __; associate professor __; professor ; other (specify).
- 3. How many years have you been employed full time at any college or university? Less than one __; 1 __; 2 __; 3 __; 4 __; 5 __; 6-7 __; 8-9 __; 10-12 __; 13-15 __; 16-18 __; 19 or more ___.
- 4. How many years have you been employed at this university? Less than one ___; 1___; 2 ___; 3___; 4 ___; 5 ___; 6-7 ___; 8-9 ___; 10-12 ___; 13-15 ___; 16-18 ___; 19 or more _____.
- 5. Is your appointment in your present position full-time or part-time? Full-time ____; part-time ____.
- 6. How many years, if any, have you taught at the elementary and/or secondary level? (Check the combined total) None __; 1 __; 2 __; 3 __; 4 __; 5 __; 6-7 __; 8-9 __; 10-12 __; 13-15 __; 16-18 __; 19 or more __.
- 7. What is your total number of years, if any, of administrative experience in a public or private school system? None ___; 1__; 2 __; 3 __; 4 __; 5 __; 6-7 __; 8-9 __; 10-12 __; 13-15 __; 16-18 __; 19 or more ___.
- 8. What is the highest degree that you have earned? A B or B S ___; M A or M S ___; Ed. S. or 6-Year Diploma ___; Ed.D. ___; Ph.D.___; Other (specify) _____.
- 9. What institution granted your highest degree? _____.
- 10. What institution granted your first degree? ____
- 11. In what part of the country did you spend your childhood? East ___; Midwest ___;
 Far West ___; North ___; South ___; Foreign ___; Other (specify) ______
- 12. In what size community did you spend most of your childhood? Rural ___; Village __; Small town ___; City of moderate size ___; Large city ___; Suburban community of city of moderate size ___; Suburban community of a large city ___.
- 13. What is your present marital status? Single ___; Married ___; Other _
- 14. What is your age? Under 21 ___; 21-25 ___; 26-30 ___; 31-35 ___; 36-40 ___;

 41-45 ___; 46-50 ___; 51-55 ___; 56-60 ___; 61-65 ___; 66-70 ___; Over 70 ___.
- 15. What is your sex? Female ___; Male ___.
- 16. How many children have you? None __; 1 __; 2 __; 3 __; 4 __; 5 or more ___.
 17. What is your salary range? Less than \$5,000 __; \$5,000-5,999 __; \$6,000-6,999 __;
- **\$7,000-7,999** ___; **\$8,000-8,999** ___; **\$9,000-9,999** ___; **\$10,000-10,999** ___;
- **\$11,000-11,999** ___; **\$12,000-12,999** ___; **\$13,000-13,999** ___; **\$14,000-15,999** ___;
- \$16,000-17,999 ___; \$18,000-19,999 ___; \$20,000 and over ____.
- 18. The above salary is for: Academic year ____; Calendar year ____.

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The Follow-up Letter: Sent to all faculty included in the study population.

April 28, 1967

Dear Faculty Member,

The attached green cover sheet will remind you of the questionnaire sent to you three weeks ago. The anonymity of respondents makes a "blanket" follow-up letter necessary. If you have completed and returned the questionnaire, please accept my appreciation and disregard this letter.

If you have not yet completed and returned the questionnaire, I would appreciate the 8-10 minutes of your time it takes to do so. I hope to have a rather high percentage of return from your university. As of this date 62% have been returned.

Once more, let me thank you for your help with this study.

Sincerely,

Paul C. Shank Research Assistant 401-A, Erickson Hall Michigan State University

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TABLE 3.2.--Characteristics of the study population--major work-load responsibility

TABLE 3.3.--Characteristics of the study population--a comparison of selected rewards system items by academic rank, sex, and age: for six universities.

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TABLE 3.3.2.--A comparison of selected rewards system items by academic rank, sex, and age: for university "two."

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TABLE 3.3.4.--A comparison of selected rewards system items by academic rank, sex, and age: for university "four."

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TABLE 3.3.6.--A comparison of selected rewards system items by academic rank, sex, and age: for university "six."

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population embers in ot s system ite	lary	Other	91 37.3%	103 42.2%	33 13.5%	10 4.1%	7 2.9%	0	244															
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aracteristics " university v	ic Rank	Other	45 18.4%	115 40.9%	41 16.7%	21 8.6%	19 7.8%	4 1.6%	245															
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