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THE LEVEL OF OCCUPATIONAL ASPIRATION OF MEN SCHOOL PRINCIPALS. NATIONAL PRINCIPALSHIP STUDY SERIES, MONOGRAPH 6. FINAL REPORT.

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DESCRIPTORS- *ASPIRATION, *CAREER CHOICE, *PRINCIPALS, MALES, *CAREER OPPORTUNITIES, SELF EVALUATION, *JOB SATISFACTION, ROLE PERCEPTION, SOCIAL MOBILITY, ORGANIZATIONAL CLIMATE, SOCIOECONOMIC STATUS, PARENT PARTICIPATION, STATISTICAL ANALYSIS, QUESTIONNAIRES, CAMBRIDGE,

A SIXTH AND FINAL PHASE OF A NATIONAL PRINCIPALSHIP STUDY, BASED ON DATA OBTAINED FROM 382 MALE PRINCIPALS IN 41 LARGE CITY SCHOOL SYSTEMS, WAS DESIGNED TO EVALUATE THE LEVEL OF OCCUPATIONAL ASPIRATION (LOA) OF MALE SCHOOL PRINCIPALS, DEFINED AS THEIR DESIRE TO ATTAIN HIGHER LEVEL ADMINISTRATIVE POSITIONS IN SCHOOL SYSTEMS. THE STUDY AIMED PRIMARILY TO ISOLATE SOCIAL AND PSYCHOLOGICAL CONDITIONS SERVING AS DETERMINANTS OF LOA AND TO EXAMINE THE EFFECTS OF LOA ON THE ROLE PERFORMANCE OF EDUCATIONAL ADMINISTRATORS AND THE FUNCTIONING OF THEIR SCHOOLS. TWENTY-TWO FINDINGS SUMMARIZE THE EXTENT TO WHICH STATISTICAL ANALYSIS REVEALED FIVE CATEGORIES OF VARIABLES AS DETERMINANTS OF LOA--(1) SOCIAL IDENTITIES (AGE, RACE, RELIGION, SOCIOECONOMIC BACKGROUND, HIGHEST ACADEMIC DEGREE, SCHOOL LEVEL), (2) CAREER DECISIONS AND EXPERIENCES, (3) JOB SATISFACTION, (4) SELF-CONCEPTIONS AND VALUE ORIENTATIONS, AND (5) ROLE AND ORGANIZATIONAL PERFORMANCE. LOA WAS NOT SIGNIFICANTLY RELATED TO ROLE PERFORMANCE OF PRINCIPALS OR TO ORGANIZATIONAL FUNCTIONING OF SCHOOLS. SIX FINDINGS SUMMARIZE THE EXTENT TO WHICH PRINCIPALS DESIRE ASSIGNMENT TO VARIOUS HIGHER ADMINISTRATIVE POSTS. EA 001 115 IS THE FIFTH DOCUMENT IN THIS SERIES. (JK)

THE LEVEL OF OCCUPATIONAL ASPIRATION OF MEN SCHOOL PRINCIPALS

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Final Report

Cooperative Research Project No. 2536

Graduate School of Education

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The research reported herein was performed under Contract No. 2536 (5-1053-2-12-1) with the Cooperative Research Branch, United States Office of Education, Department of Health, Education, and Welfare.

Preface

This is the sixth and the final monograph that reports the findings of the National Principalship Study, a research program in the sociology of education sponsored by Harvard University and supported by grants from the Cooperative Research Branch, U. S. Office of Education, Department of Health, Education, and Welfare. The research studies reported in the first four reports were performed under Contract SAE-8702 and the fifth and present investigations were carried out under Contract 5-1053-2-12-1.

This final report presents the findings of the Study that investigated possible detminants and effects of the level of occupational aspiration of 382 men principals in 41 large city school systems in all regions of the United States. The first monograph focused on the effects and determinants of the professional leadership exhibited by elementary principals as the executives of their schools. The second one examined the backgrounds, careers, and performance of women and men as elementary school principals and the relationship of the sex of principals to the functioning of their schools. The third dealt with the determinants and effects of selected dimensions of the principals' administrative performance, and the fourth one presented the findings that emerged from the study of role conflicts to which principals are exposed. The fifth monograph examined factors associated with their intrinsic job satisfaction and career satisfaction.

It would not have been possible to undertake the inquiry reported in these pages without the cooperation and collaboration of many individuals. First, I wish to acknowledge my indebtedness to members of the

original senior staff: Peter C. Dodd, Robert Dreeben, Robert E. Herriott, Joseph L. Hozid, Paul E. Kelly, Keith W. Prichard, Anne E. Trask, and Dean K. Whitla. In addition to participating in the design of the overall Study, they prepared research materials, supervised field work activities in many cities, and conducted most of the interviews. The senior staff also served as editors and coders (or supervisors of coding) for both the questionnaire and interview data. Robert Dreeben assumed major responsibility for coding the open-ended interview materials and Peter C. Dodd, Joseph L. Hozid, and Anne E. Trask worked closely with him in this activity. Robert E. Herriott coordinated the development of the many research instruments and supervised the extensive computer programming and data reduction required during the initial years of the Study. His advice on Guttman scaling procedures was an important contribution to the present study. Keith W. Prichard and Paul E. Kelly reviewed relevant bodies of social science and educational literature with considerable skill. Dean K. Whitla had primary responsibility for developing and carrying out the sampling procedures. He also served as Associate Director of the Study during the early years of the research program.

I also wish to express my appreciation to the following individuals who augmented the senior staff in the data collection phase of the Study: John Clark, James M. Coffee, Mario D. Fantini, Harold L. Hodgkinson, and Miriam Lieber.

The following individuals offered valuable services as research assistants during the earlier periods of the Study: Philip S. Bonacich, Hugh Cline, Nathan Gross, David Hill, George W. Perry, Nancy H. St. John,

and Norman A. Sprinthall.

The senior staff was advised on various statistical problems related to the overall design of the National Principalship Study by the following individuals: William G. Cochran, Howard Raiffa, and John Tukey. Their cooperation is acknowledge with considerable gratitude.

Richard Labrie and Charles Cantor of the Harvard Statistical Laboratory were also of considerable assistance in developing computer programs to facilitate the early data processing phase of the work. The statistical work presented in this report was performed at the Harvard Computing Center. For his valuable services to the data processing activities of the Study, I am also indebted to Walter O. Jewell, III. Important clerical or computational tasks were performed by Frances Cleveland and Sandra J. Gross.

There are several other people who deserve special comment because of their contributions to the Study. Donald J. Blyth, Nathan Jacobson, and David C. McClelland were extremely generous in sharing their wisdom with staff members about a number of problems examined in the research. Herold C. Hunt and Robert H. Anderson also stimulated our thinking about many issues in educational administration.

Marion L. Crowley served as the secretary of the Study, and I am especially indebted to her for her many invaluable contributions to this report, which included typing and assembling the final manuscript. I also wish to express my thanks to Charlene A. Worth who ably carried out secretarial and related responsibilities.

Three hundred and eight-two principals in 41 large American cities

participated in the inquiry reported in these pages. Without the cooperation of these educators and the endorsement and support of the National Principalship Study by their school administrations and school boards, it would not have been possible to carry out the research program. I am greatly appreciative of their interest in the Study and the time and effort they devoted to it. I hope the research findings presented in this report of the Study will constitute some repayment for their cooperation.

Finally, I wish to express my special appreciation to Joseph B. Giacquinta, David A. Napior, and Eigil D. Pedersen for their valuable services as research assistants on the level of aspirations inquiry. Their ideas and efforts influenced the design of the study and the analysis of the data in many important ways. It is a pleasure to indicate my indebtedness to them by acknowledging their contributions on the cover page of this report.

Neal Gross

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Chapter 1: Introduction

Men who serve as principals of public schools are located at or near the bottom of the bureaucratic apparatus of school systems. They also represent, however, a set of individuals who have experienced upward mobility in public education since in making the career move from teaching to the principalship earlier in their careers they enhanced both their incomes and their social status. This inquiry is primarily concerned with the ambitions of male principals for further upward movement along the career ladder of public education. More specifically, our central interest is in the level of occupational aspiration (LOA) of principals which is defined as their desire to attain higher level administrative positions in school systems.

The Level of Occupational Aspiration inquiry conducted as part of the National Principalship Study had two primary objectives: first to investigate possible determinants of variation among men principals in their aspirations for higher level administrative positions; and second, to examine the effects of LOA on their role performance and the functioning of their schools. In our efforts to accomplish them, we also hoped to shed light on questions of the following kind about the career aspirations of principals: what types of positions in the career line of public education constitute the major targets of their ambitions? Do principals generally aspire more to improve their conditions as principals or to achieve higher administrative posts? For those who desire to climb the occupational ladder in education, do they generally perceive higher level jobs in their own school systems as more attractive than

similar positions in other school systems? To what extent do principals aspire to be more active in their professional associations?

The data for the inquiry were obtained from a sample of 382 men principals of elementary, junior high, and senior high schools located in 41 large cities in all regions of the United States. In addition, information secured from their teachers were also utilized in certain of our analyses. Through the use of a variety of research methods described in Chapter 2, we attempted to shed light on correlates of the LOA of school principals.

The Study in Sociological Perspective

In social science perspective the LOA inquiry deals with issues of concern to students of social mobility and of the functioning of formal organizations.

Sociological investigations of social mobility[1] have focused primarily on two kinds of phenomena. The first is the actual vertical mobility of individuals in the social structure. Studies of this kind[2] have most frequently examined intergenerational occupational mobility or the degree to which men have moved upward or downward in the occupational structure, using their fathers' occupations as the point of comparison. However, a number of investigations[3] have also focused on the occupational histories of individuals with reference to the amount of vertical movement they have experienced in their own careers. As a consequence of these inquiries on intergenerational and career mobility, a considerable body of knowledge has been accumulated about the rates, mechanisms,

and correlates of these phenomena in the United States and in other societies.[4] These studies have also revealed that the study of occupational mobility involves complex methodological issues, some of which are currently the subjects of considerable debate.[5]

The second phenomenon that has received extensive treatment by investigators of social mobility has been the desire for social mobility or the aspirations of individuals to improve their social and economic status. Although some studies have dealt with the economic and social ambitions of adults,[6] most inquiries have focused on the educational and occupational aspirations of students.[7] They have generally revealed strong positive correlations between indices of the social and economic backgrounds of both high school and college students and their educational and occupational ambitions.

In reviewing the social science literature, we found that little systematic attention had been directed to the question of the determinants of the aspirations for vertical mobility of professional or managerial personnel who occupy the same or similar positions in the occupational structure. Two inquiries that considered this problem have special pertinence to our inquiry.

In his study of beginning teachers, Mason[8] examined in considerable detail their future occupational plans. He investigated the vocational plans of first year teachers for the following school year, the likelihood of their leaving teaching within five years, and their long-range career objectives. Of his many interesting findings those concerning sex differences in occupational plans and the career aspirations of men teachers are of special relevance to the LOA study. Mason's data

showed that in general the pattern of replies of men and women in their first year of teaching was similar with respect to their plans to teach the following year. However, when he extended the time reference to five years, he found that 65 per cent of the women as compared to 26 per cent of the men said they "probably" or "definitely" would leave teaching within five years.[9] When he extended the time reference of the teachers' occupational plans indefinitely by asking them if they planned to stay in teaching continuously until retirement, "only 29 percent of the men and 16 percent of the women expected to stay in classroom teaching continuously until retirement."[10]

His data further revealed that the men who did not plan to remain in teaching most frequently expressed ambitions to stay in education in a nonteaching position.[11]

Our study in one sense may be viewed as an extension of Mason's research. That is, his findings shed light on the occupational aspirations of beginning men teachers and revealed that a large proportion of them have ambitions to stay in education but to move to nonteaching positions. Our inquiry is concerned with former men teachers who achieved their ambition to become principals and focuses on their aspirations to achieve higher level administrative posts in education. In addition, as noted, Mason studied sex differences in the career plans of beginning teachers. We shall also present data about differences in the level of occupational aspiration of women and men who remained in public education and became school principals. Our analysis of the determinants of LOA, however, will be restricted to men principals because of reasons to be discussed

in Chapter 2, where we also present the findings on sex differences in the ambitions of school administrators.

The second study of relevance to our investigation is one conducted by Tausky and Dubin.[12] They proposed a theory of occupational aspiration that is based on the concept, "the anchoring of career perspective." They point out that the sociological literature contains two conflicting sets of assumptions about the orientation of individuals to occupational mobility in stratified occupational systems: the first they refer to as the "unlimited success" theory and the second as the "limited success" theory. In their words:

> One position is that actors are oriented to career-long occupational advancement; the goal is to reach a position in or near the peak of an occupational structure, and self-esteem is lost if the goal is not reached. A contrasting standpoint views actors as satisfied either to maintain their positions or to make modest progress within an occupational structure, with no loss of self-esteem if careers terminate below high-level positions. For convenience we will refer to the former as an "unlimited success" theory, and the latter as a "limited success" theory.[13]

Tausky and Dubin maintain that the unlimited and limited success theories are not competing formulations, but rather complimentary ones ". . .because both incorporate the same motivational mechanism. . .the anchoring of career perspective."[14] They view a career perspective as including an individual's recognition that his occupational life history is part of his career, and that it constitutes a reference point from which

he assesses his present occupational status or possible future occupational positions.

They argue that there are two logical alternatives that a person may utilize in evaluating his career. The first is to anchor the point of reference at the origin of the career and the second is to focus on the point of "ultimate possible achievement." They refer to these polar orientations as "downward" and "upward" career anchorage. They say:

> The basic idea is that some individuals value top-level positions highly and strive for them throughout their occupational lives, while others value the occupational progress already experienced. (Of course, in some cases these polar anchor points for evaluating careers are not mutually exclusive.) Individuals who fit the unlimited success model of motivation anchor their career orientations on top-level positions. Evaluating success in a career then depends on how close to the organizational peak is the currently held position. An individual with a limited success orientation evaluates achievement by the distance he has advanced from his occupational starting point. Figuratively, the unlimited success perspective looks upward to maximum goals, while the limited success perspective looks downward to starting points.[15]

The basic theoretical interest of Tausky and Dubin was to ". . .suggest that a theory of occupational aspiration should account for both unlimited and limited success aspirations."[16] The objective of their

empirical study was to determine the percentage of middle-level managers in business firms with downward and upward career orientations and to account for variation in terms of other variables.

Our interest is not to account for the downward versus upward career orientations of principals but rather to explain why they vary in their aspirations for upward vertical mobility.

Variation in career anchorage is one possible condition that might account for the different orientations to occupational mobility of a set of managerial personnel in the same position such as principals. It could be argued that the more individuals in the same occupational position value the occupational progress they have achieved (downward career anchorage) the less they will aspire for further advancement; or conversely, the more individuals value high level positions and strive for them throughout their occupational lives (unlimited success perspective) the more they will aspire for further advancement.

But there are other circumstances that may account in part for the variation in level of occupational aspiration of individuals who are incumbents of the same managerial position. One is that they may perceive different opportunities or chances for upward vertical mobility. A second is that they may utilize different comparative reference groups in assessing their current occupational status. A third is that they may attribute differential importance to considerations of economic and social status in their career decisions; and a fourth possibility is that the satisfactions or dissatisfactions they derive from their current positions may serve to increase or decrease their LOA.

The analyses to be presented in later chapters about possible determinants of variation in the level of occupational aspiration of principals were designed to determine whether these and other conditions in fact are related to the LOA of principals.

We also found that little consideration had been given in the literature on formal organizations to the second major objective of our investigation, the determination of the effects of LOA on role and organizational performance. In fact, we were able to locate only one study that dealt with the problem. Seeman,[17] in addition to investigating the influence of career mobility (number of job changes over a specified time period) and prestige origin (present position in comparison to that of father's) on the role performance of school administrators, also studied the relationship between mobility attitudes (whether an executive is status or achievement oriented) and their role behavior. His findings revealed that neither career mobility nor prestige origins were significantly related to the six dimensions of leadership performance he examined whereas attitudes toward mobility were associated with two of them: the greater the school administrators' orientation to status (as opposed to achievement) the more they were judged by their school board members as being low on consideration and the higher the school executives' assessment of their performance on "initiating structure." He also found that their mobility attitudes influenced the association between career mobility and their role performance. In our study, in addition to inquiring about the consequences of an administrator's LOA on his conduct, we shall also examine its impact on the functioning of his organization.

The Study in Educational Policy Perspective

The questions which we shall examine also deal with issues of considerable interest to individuals responsible for the management of school systems. A number of superintendents and directors of personnel of school systems have indicated that they feel it important to know whether principals who aspire to become higher administrators differ significantly in their administrative performance or their influence on their schools from those who have little or no desire to be upwardly mobile. They also have expressed great interest in the kinds of social and psychological factors that discriminate between principals who have strong and weak desires to move up the ladder of educational administration. However, they generally lack information of these kinds. Furthermore, few top school officials appear to know about the targets or the intensity of the career aspirations of their principals. In view of the limited knowledge about the determinants, effects, nature, and intensity of the occupational aspirations of principals and the importance of these kinds of data for the determination of administrative personnel policy in school systems, it is hoped that the study will be of value to these officials in their deliberations and decisions about ways to improve the bureaucratic apparatus and the performance of their school systems.

Organization of the Report

Chapter 2 describes the research methods used to secure and analyze the data and the procedures used to obtain a measure of the LOA of principals. In addition, it presents the findings that emerged from an analysis of the principals' responses to the Career Aspirations Instrument with respect to their aspirations in three general areas: their ambitions to move to positions higher up in the educational administration hierarchy; their desires to upgrade their occupational status in the principalship; and their interests in achieving recognition in their professional associations.

In Chapter 3 we examine whether certain of the principals' social identities are associated with their LOA. We present findings about the relationships of age, race, religion, and the socio-economic backgrounds of principals to their LOA and also inquire whether the highest academic degree they had achieved or the level of school they manage (elementary, junior high, or senior high) is associated with it.

In Chapter 4 we present and test hypotheses about the impact on the LOA of principals of a set of variables that reflect differences in their occupational orientations and their job histories. Chapter 5 examines a number of hypotheses about indices of job satisfaction that we reasoned would be associated with the level of occupational aspiration of principals, and Chapter 6 inquires about the influence of their assessment of their skills as educational administrators and their value orientations on LOA.

In Chapter 7 we deal with the question of the effects of the principals' LOA on their role performance and the operation of their organizations. Chapter 8 summarizes the major findings of the inquiry.

Notes and References for Chapter One

1. For reviews of the literature on social mobility, see Pitirim Sorokin, Social and Cultural Mobility (New York: Free Press of Glencoe, 1959); Seymour M. Lipset and Reinhard Bendix, Social Mobility in Industrial Society (Berkeley: University of California Press, 1956); Joseph A. Kahl, The American Class Structure (New York: Rinehard & Co., Inc., 1957); also see Reinhard Bendix and Seymour M. Lipset (Editors), Class, Status, and Power: Social Stratification in Comparative Perspective, second edition (New York: The Free Press, 1966), Part V.

2. For findings of studies concerned with vertical mobility, see Bendix and Lipset, op. cit.; also see Natalie Rogoff, Recent Trends in Occupational Mobility (Glencoe: The Free Press, 1953).

3. See, for example, Percey E. Davidson and H. Dewey Anderson, Occupational Mobility in an American Community (Stanford: Stanford University Press, 1937); Albert J. Reiss, "Occupational Mobility of Professional Workers," American Sociological Review, 20 (1955), pp. 693-700; Robert Dubin, The World of Work (New York: Prentice-Hall, 1958), pp. 260-270; Delbert C. Miller and William H. Form, Industrial Sociology: The Sociology of Work Organizations, second edition (New York: Harper & Row, 1964), Chapter 13.

4. For research on social mobility in other societies, see Neil J. Smelser and Seymour M. Lipset (Editors), Social Structure and Mobility in Economic Development (Chicago: Aldine Publishing Company, 1964); and Bendix and Lipset, op. cit.

5. See Otis Dudley Duncan, "Methodological Issues in the Analysis

of Social Mobility," in Smelser and Lipset (Editors), op. cit., pp. 51-97.

6. See Miller and Form, op. cit., Chapter 13 for a review of these studies; also see W. Lloyd Warner and James C. Abegglen, Occupational Mobility of American Business Leaders (Minneapolis: University of Minnesota Press, 1955).

7. See, for example, William H. Sewell, et al., "Social Status and Educational and Occupational Aspirations," American Sociological Review, 22 (1957), pp. 67-73; Robert E. Herriott, "Some Social Determinants of Educational Aspiration," Harvard Educational Review, 33 (1963), pp. 157-177; Ralph H. Turner, The Social Context of Ambition (San Francisco: Chandler Publishing Co., 1964).

8. Ward S. Mason, The Beginning Teacher: Status and Career Orientations (Washington: U. S. Government Printing Office, 1961).

9. Ibid., pp. 100-102.

10. Ibid., p. 103.

11. Ibid.

12. Curt Tausky and Robert Dubin, "Career Anchorage: Managerial Mobility Motivations," American Sociological Review, 30 (1965), pp. 725-735.

13. Ibid., p. 725.

14. Ibid.

15. Ibid., p. 726.

16. Ibid.

17. Melvin Seeman, "Social Mobility and Administrative Behavior," American Sociological Review, 23 (1958), pp. 633-642.

Chapter 2: Research Methods[1]

This chapter presents the research methods used to secure and analyze the data examined in our investigation of the level of aspiration of school principals. Since they were obtained and analyzed as a part of a larger research program, many of the methodological issues were resolved in the manner most compatible with the several objectives of the entire National Principalship Study. Therefore, we shall first describe research activities and decisions relevant at once to the present and all the other inquiries. These include staff activities in the planning stage of the study, the population and sampling procedures, methods of collecting data and techniques used in their processing and analysis. We then present the way we measured the level of aspiration of school principals and report decisions of special relevance to the analysis and presentation of the data of the LOA inquiry.

Preliminary Research Activities

Prior to the initiation of field work, the staff of the National Principalship Study engaged in many preliminary activities related to the several investigations of the Study. They specified the central independent and dependent variables of the several inquiries; they reviewed the relevant literature on the development of the public school principalship from the position of "principal teacher" to supervising principal and educational and social science publications dealing with this occupational role.

As the research designs of most of the investigations of the

National Principalship Study began to take shape, the staff initiated work on the instruments needed to measure the key variables. A number of first drafts of instruments were developed to measure such central concepts as "role conflict," "role orientation," and "level of aspiration." Members of a graduate seminar at Harvard University pre-tested research instruments by interviewing 75 principals of schools located in the Greater Boston metropolitan area, and several graduate students, school principals on leave, gave considerable time to the pre-testing and review of our preliminary materials.

After the full array of instruments and interview schedules was developed a final pre-test was made on eight principals from the Greater Boston and New York areas who were invited to our Cambridge headquarters for a day. Each was interviewed for approximately eight hours, and a record kept as to the length of time it took him to complete each section of the schedule. After the interview the subjects and the interviewers met in small groups to discuss the day's proceedings. This pre-test procedure had important consequences upon the Study, resulting as it did, in major modifications in the interview schedule and in the techniques of data collection. It also served as a trial run for the field work staff that later conducted interviews and supervised field operations in all regions of the nation.

It became apparent from the original eight-hour pre-test interview that an additional four hours would be required to obtain all the data desired. Therefore, it was decided to obtain the data from the principals through three separate procedures. The first was a four-hour

Personal and School Background Questionnaire to be filled out by the principal in his home community. The second was a four-hour Role Questionnaire filled out by him at a group session with other principals in his city. The third consisted of a Personal Interview with each principal individually, requiring approximately four hours. Procedures employed in obtaining data from the principals will be described later in this chapter. During this initial phase of the Study the target population was selected and the sampling procedure determined.

The Population and Sample

The target population of school principals for the National Principalship Study was all supervising principals in cities of 50,000 or more during the 1960-1961 school year. The first reason for limiting the sample to large cities was because we wanted to exclude from the Study all principals who had any teaching responsibilities. Since there was no accurate way to identify them in all communities in the United States, the smaller communities, where this situation is most frequently found, were eliminated.

The second consideration was financial. In order to obtain a national sample and yet keep within the available funds, it was necessary to obtain a multiple of seven principals in each city to be visited. School systems in cities with population less than 50,000 frequently have fewer than seven schools.

In selecting the sample of school personnel, the latest available data were used. The 10,956 principalships in cities with populations of

50,000 or over listed in the 1955-1956 Biennial Census of the U. S. Office of Education were stratified on the basis of geographical region, system-per-pupil expenditure, and size of city. By the use of a cluster sampling procedure designed to obtain a five per cent sample of the population, 508 principals in 41 cities were selected. The Director or Associate Director of the Study held long-distance telephone conversations with the local superintendents to explain the objectives of the Study and to work out a time schedule for each school system's participation in it. All but two of the school superintendents readily agreed to give every possible sort of cooperation to the Study, but after the Director had gone to see them these two, also, pledged their full cooperation.

In the first phase of the sampling procedure it was determined how many principals in each of the 41 cities would be studied. To select the actual sample the schools in each community were classified according as they were elementary, junior high, or senior high and again by the socio-economic characteristic of their student bodies (high, medium, or low), as estimated by the superintendent of schools. This ensured a sample of schools which varied both as to level and the socio-economic status of their populations. All teaching principals and principals supervising more than one building were excluded from the sample.

Data Collection

The collection of data from principals was divided into three phases: in the first, each of the 508 principals in the sample was

mailed a personal letter notifying him of his selection, explaining the aims and design of the Study and requesting that he provide information about his personal characteristics (e.g., age, sex, marital status), his family background (e.g., father's occupation, community of origin), his school (e.g., size of school population, characteristics of teachers), and his job history. The Study's confidentiality and anonymity were made clear. Then each principal was asked to complete the Personal and School Background Questionnaire at his convenience and bring it to a luncheon meeting to be held with principals in his city later that month.

During the fall of 1960 each of the 41 cities selected through the sampling procedure was visited by members of the Study staff for approximately five days. As a rule, the staff would arrive on Sunday evening and set up headquarters in a downtown hotel. On Monday morning the field-work director would contact the superintendent of schools or his representative, review with him the week's planned activities and answer his questions.

On Monday a luncheon was held for the superintendent of schools, his chief administrative aides, the principals selected to participate in the Study and members of the Study staff. At that time, the latter explained the full nature of the Study and emphasized again that replies to questions would be treated anonymously and tabulated only in combination with the responses of other principals. Questions they raised about the Background Questionnaire or other phases of the Study were answered at this session. After the luncheon, the superintendent of schools and his aides were excused and the Role Questionnaire was

distributed to the principals.

This questionnaire contained 10 sections and required approximately four hours to complete. It focused on a large number of areas: the principal's attitudes and values, his definition of his role, his satisfactions and dissatisfactions, and his aspirations. In addition, each principal was asked to serve as an observer of both his administrative superiors and his teachers and to report on their behavior toward him. Members of the Study staff who were in the room during this four-hour period were ready to answer the principals' questions about the research instruments they were completing.

The third phase took place during the latter part of the week in which the luncheon meeting was held. It consisted of a three- to five-hour personal interview with each principal, usually in a private room at the headquarters, during which the research materials from the Background Questionnaire and the Role Questionnaire were reviewed. The principal was then asked questions which could best be dealt with personally: questions about his sources of strength and weakness, his motives in becoming a principal, the obstances confronting him in his efforts to do a better job, and so on.

The total time of questioning the principals during the three phases averaged about 12 hours. Only seven of the 508 principals selected in the sample failed to participate in (or to complete) all three. The other 501 made up the research sample of the National Principalship Study.[2]

Processing and Reduction of Data

The Background Questionnaire and the Role Questionnaire were pre-coded. Data from the Personal Interview, being open-ended, required special coding. The pre-coded questionnaires were designed in such a way that the responses could be punched on IBM cards directly from the questionnaire. However, prior to punching, each questionnaire was read and edited by a member of the staff and any responses which might cause doubt in the mind of a key-punch operator were clarified. If an answer of a respondent was unclear it was coded as "blank." After editing, all pre-coded data were punched on IBM cards by professional key-punch operators and then repunched (verified) to insure accuracy. Because of their open-ended nature, the data from the Personal Interview were handled differently. Members of the project staff discussed the replies and drew up a coding scheme based on important aspects of their content. When a set of categories for coding was agreed upon, the replies were re-read and entered on code sheets by two independent coders. If they agreed on at least 90 per cent of the coding no further checks were made, but if not, they discussed their differences and clarified their definitions, or else modified the coding scheme, after which a reliability check was run on a new sample of replies. The completed code sheets were then key-punched and varified as was done with the questionnaire materials. In all, over 2,500 presonses of each principal were entered on IBM cards and so made available for tabulation and analysis.

The bulk of the data processing was carried out electronically through the use of high-speed computers and their associated equipment.

A chief use of this equipment was to develop summary measures of concepts from responses in a given area. For example, one way to examine whether older or younger principals experience more role conflict in their work would be to compare the responses of the administrators in different age groups to a number of role conflict questions, but an alternative is to summarize the information from the set of questions into a "role conflict score" and then compare their scores by age. Since many of the concepts used in the various investigations of the Study have been measured with summary scores it is well to consider briefly the two statistical techniques, Guttman scaling and factor analysis, used to reduce data from a series of responses to a single score.

One method for arriving at a summary "role conflict score" is to take the responses of a given subject to each of a series of questions and sum them. This method of developing a "total score" gives equal weight to all questions. An advantage of both Guttman scaling and factor analysis over the "total score method" is that they provide an empirical basis for separating "good" indices of exposure to role conflict from "bad" and even further for weighting the good indices as to their degree of "goodness." Where Guttman scaling and factor analysis differ is in the criteria used to separate the "good" from the "bad" items and to weight the "good" ones. In general, the Guttman procedure involves fewer assumptions and has a more severe criterion of scalability than does factor analysis, whereas the latter is probably more objective.[3]

In approaching the problem of developing indices, we frequently used procedures suggested by Guttman to measure key concepts.[4] When

these procedures could not be applied or when preliminary analysis revealed that dimensions other than the one conceptualized existed within the data, a principal components factor analysis was usually performed.[5] If the resulting factors could be interpreted with clear sociological meaning, their associated loadings were used as weights in computing factor scores, but if not sociologically meaningful, the factor loadings were rotated orthogonally using the Varimax criterion developed by Kaiser.[6] The new loadings were then converted to factor coefficients using the "shortened method" suggested by Harman and the resulting coefficients used as weights for computing factor scores.[7]

With this general background let us turn now to the specific methodological problems of the LOA inquiry.

The Career Aspirations Instrument

One of the instruments in the Role Questionnaire of the National Principalship Study was designed to determine the professional and occupational aspirations of school principals within the field of education. This Career Aspirations Instrument (see Appendix A-1) included 16 questions, 13 of which dealt with three general types of aspirations: (1) the desire of principals to move to positions higher up in the educational administration hierarchy; (2) their desire to remain in the principalship but to upgrade their occupational status in that position; and (3) their desire to achieve recognition in their professional associations. Of the three additional items one was designed to ascertain their ambitions to become a professor of education, and the other two

were quite general in nature, dealing with their interest in obtaining an outstanding reputation among their colleagues and in taking taking every opportunity to advance their own careers.

In responding to the 16 items the principals were asked to select one of the five following response categories that best reflected their feelings:

I would not want to. . . .

I am not especially anxious to. . . .

I have some desire to. . . .

I would very much like to. . . .

I am extremely anxious to. . . .

In view of the limited information available about the occupational and professional aspirations of educational administrators, we feel it is worthwhile to present an analysis of the responses of the principals to the Career Aspirations Instrument, before proceeding with the description of the procedures we used in developing our summary measure of level of occupational aspiration (LOA).

Table 2-1 presents the percentage distribution, mean, and standard deviation of the men principals' responses to each of five items in the Career Aspirations Instrument dealing with their desire to move to a higher administrative position in the field of education. An examination of this table reveals several interesting findings. First, the most desired type of movement up the educational ladder for principals is to secure a higher administrative position in their <u>own</u> school system. Fifty-four per cent indicated some degree of positive orientation to this

Table 2-1. Percentage Distribution, Mean, and Standard Deviation of the 382 Men Principals' Responses to Five Items in the Career Aspirations Instrument Concerned with the Principals' Desire to Move to a Higher Level Administrative Position

The Question	The Response Choices and Weights
How desirous are you of doing the following things?	1 = I would not want to. . . . 2 = I am not especially anxious to. . . . 3 = I have some desire to. . . . 4 = I would very much like to. . . . 5 = I am extremely anxious to. . . .

Item*	Per Cent of Principals Responding					Mean	Standard Deviation	N
	1	2	3	4	5			
5. Obtain a higher administrative position in my current school system.	17	29	23	21	10	2.78	1.24	382
7. Become an assistant or deputy superintendent of schools in a large city system.	32	34	18	10	6	2.23	1.17	382
6. Obtain a higher administrative position in some other school system.	40	39	13	6	2	1.92	0.97	382
8. Become the school superintendent of a large city system.	54	30	9	4	3	1.73	1.01	381**
9. Become the school superintendent of a small school system.	57	31	9	2	1	1.60	0.84	382

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response of one principal to this item.

type of career move whereas no more than 34 per cent responded in this manner to any of the other four items. Second, principals aspire to obtain higher administrative positions in other school systems much less frequently than they do to obtain them in their own system: over two and a half times the percentage of the men indicated some desire to secure a higher administrative post in their present, than in some other school system (54 per cent versus 21 per cent).

Third, a relatively small proportion of the principals aspire to become school superintendents. Only 16 per cent expressed any degree of interest in becoming a superintendent of a large city school system, and a slightly smaller proportion, 12 per cent, expressed such interest in serving as the chief administrator of a small school system. Furthermore, for the entire sample, less than one in 14 of the principals indicated that they would "very much like to" or were "extremely anxious to" serve as a school superintendent. Fourth, higher administrative positions lower on the educational hierarchy than the superintendency, such as an assistant or deputy superintendent, constitute somewhat more attractive targets than the superintendency. Over three out of ten of the principals expressed some degree of interest in these lower status administrative positions, whereas, as noted, only one out of 14 displayed interest in the superintendency.

Thus, the findings reveal that, on the average, principals are fairly conservative in their expression of aspirations toward higher level administrative positions. They seem to have some preference for geographic stability and in general do not aim at the top level administrative posts.

Table 2-2 shows the degree of interest our national sample of male principals had in five different possible ways that would result in upgrading their status as principals. The data reveal a number of findings of considerable interest. First, they indicate that a substantially greater proportion of the male administrators desire to improve their status in the principalship by obtaining a higher salary in their current position than by moving to another principalship: whereas 92 per cent of them expressed at least some desire to secure a higher income in their current job, less than half gave similar responses to any of the other four items, each of which would involve leaving their present position for another principalship. In fact, no more than 27 per cent of the principals indicated a relatively strong desire ("very much like to" or "extremely anxious to") to move to another principalship with greater income, responsibility, or prestige. Second, with respect to their movement to other principalships, the administrators on the average prefer jobs that would enhance their incomes rather than their responsibilities or prestige. Whereas 49 per cent of the men expressed some or a greater degree of interest in a principalship which had a higher salary than their current position, only 37 per cent evidenced a similar degree of interest in one with greater responsibilities and only 29 per cent in a principalship with greater prestige. Third, contrary to a commonly expressed point of view, only a small proportion of men administrators of urban schools (13 per cent) display an interest in obtaining a principalship in a wealthy suburban community.

The principals' responses to the three items reflecting a desire

Table 2-2. Percentage Distribution, Mean, and Standard Deviation of the 382 Men Principals' Responses to Five Items in the Career Aspirations Instrument Concerned with the Desire to Upgrade Their Status as Principals

The Question	The Response Choices and Weights
How desirous are you of doing the following things?	1 = I would not want to. . . . 2 = I am not especially anxious to. . . . 3 = I have some desire to. . . . 4 = I would very much like to. . . . 5 = I am extremely anxious to. . . .

Item*	Per Cent of Principals Responding					Mean	Standard Deviation	N**
	1	2	3	4	5			
16. Obtain a higher salary in my present position.	3	5	15	45	32	3.98	0.97	381
4. Obtain a principalship which would pay more money than my present position.	15	36	22	20	7	2.67	1.16	381
1. Obtain a principalship that has greater responsibilities than my present position.	27	36	18	11	8	2.35	1.21	382
2. Obtain a principalship that would carry more prestige than my present position.	26	45	16	8	5	2.21	1.08	381
15. Obtain a principalship in a wealthy suburban community.	39	48	8	4	1	1.80	0.82	382

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response to the item.

for achieving recognition through participation in their professional associations are presented in Table 2-3. These data indicate, as might be expected, that a substantially larger proportion (49 per cent) of the administrators have some desire to take a more active role in their professional associations than aspire to become president of a state or national association of principals (22 per cent and 12 per cent respectively). A finding of considerable interest to those concerned with the "professionalization" of the principalship is that the majority of principals indicated little or no interest in assuming a more important role in their professional organizations and that only 14 per cent indicated that they would "very much like to" or were "extremely anxious to" expend their efforts on activities of this kind.

To this point we have focused on the principals' level of aspiration with respect to <u>each</u> of three different ways they could increase their income, status, or prestige in the world of education: by improvements in their status as a principal, by moving to a higher level in the educational bureaucracy, and by gaining recognition in their professional associations. We have seen that principals in general have a greater desire to obtain a higher salary in their current position than to improve their status by moving to another principalship. We also found that principals on the average aspire more frequently to lower level positions in the administrative hierarchy than to the highest one, the superintendency.

By rank ordering all 16 items included in the Career Aspirations Instrument according to their mean response, we can ascertain which

Table 2-3. Percentage Distribution, Mean, and Standard Deviation of the 382 Men Principals' Responses to Three Items in the Career Aspirations Instrument Concerned with the Principals' Desire for Achieving Recognition Through Participation in Professional Associations

The Question	The Response Choices and Weights
How desirous are you of doing the following things?	1 = I would not want to. . . . 2 = I am not especially anxious to. . . . 3 = I have some desire to. . . . 4 = I would very much like to. . . . 5 = I am extremely anxious to. . . .

Item*	Per Cent of Principals Responding					Mean	Standard Deviation	N**
	1	2	3	4	5			
11. Take a more important role in professional educational organizations.	19	32	35	11	3	2.51	1.02	380
13. Some day be president of a state association of principals.	38	40	13	6	3	1.96	1.02	375
14. Some day be president of a national association of principals.	49	39	6	4	2	1.71	0.89	381

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response to the item.

improvements in their occupational status, regardless of kind, they are most and least desirous of securing. Table 2-4 presents the distribution of their replies to all the items in the aspirations instrument and the mean score and rank of each item.

The item with the highest mean score (3.98) is "obtaining a higher salary in my current position," and it is the only improvement in occupational status which a majority of the principals (71 per cent) indicated that they "would very much like to" or were "extremely anxious to" secure. A substantially smaller proportion of the men responded in a similar way to the questions about obtaining an outstanding reputation among my professional colleagues (41 per cent) and taking every opportunity to advance their careers (37 per cent), the items that had the second and third highest mean scores, respectively. The item with the next highest mean score was "obtain a higher administrative position in my own system." However, it deserves emphasis that only 31 per cent indicated clear-cut positive aspirations of this kind as compared to the 71 per cent who responded that they would very much like to or were extremely anxious to obtain a salary increase in their current principalship. It also deserves note that both of these specific occupational changes most desired on the average by the principals did not require them to leave their present school system. The next "preferred" occupational change for the principals was to obtain another principalship paying more money.

By examining the other end of the rank order of the items, we can ascertain those types of positions to which principals least aspire. The item with the lowest mean score refers to becoming a superintendent

Table 2-4. Percentage Distribution, Mean, and Standard Deviation of the 382 Men Principals' Responses to the 16 Items in the Career Aspirations Instrument

The Question	The Response Choices and Weights
How desirous are you of doing the following things?	1 = I would not want to. . . . 2 = I am not especially anxious to. . . . 3 = I have some desire to. . . . 4 = I would very much like to. . . . 5 = I am extremely anxious to. . . .

Item*	Rank	Per Cent of Principals Responding					Mean	Standard Deviation	N**
		1	2	3	4	5			
16. Obtain a higher salary in my present position.	1	3	5	15	45	32	3.98	0.97	381
12. Establish an outstanding reputation among my professional colleagues.	2	7	25	27	29	12	3.15	1.13	380
3. Take every opportunity to advance my own career.	3	11	24	28	23	14	3.06	1.22	380
5. Obtain a higher administrative position in my current school system.	4	17	29	23	21	10	2.78	1.24	382

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response to the item.

Table 2-4 (continued)

Item*	Rank	Per Cent of Principals Responding					Mean	Standard Deviation	N**
		1	2	3	4	5			
4. Obtain a principalship which would pay more money than my present position.	5	15	36	22	20	7	2.67	1.16	381
11. Take a more important role in professional educational organizations.	6	19	32	35	11	3	2.51	1.02	380
1. Obtain a principalship that has greater responsibilities than my present position.	7	27	36	18	11	8	2.35	1.21	382
7. Become an assistant or deputy superintendent of schools in a large city system.	8	32	34	18	10	6	2.23	1.17	382
2. Obtain a principalship that would carry more prestige than my present position.	9	26	45	16	8	5	2.21	1.08	381
10. Become a college professor of education.	10	38	24	26	9	3	2.14	1.11	381

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response to the item.

Table 2-4 (continued)

Item*	Rank	Per Cent of Principals Responding					Mean	Standard Deviation	N**
		1	2	3	4	5			
13. Some day be president of a state association of principals.	11	38	40	13	6	3	1.96	1.02	375
6. Obtain a higher administrative position in some other school system.	12	40	39	13	6	2	1.92	0.97	382
15. Obtain a principalship in a wealthy suburban community.	13	39	48	8	4	1	1.80	0.82	382
8. Become the school superintendent of a large city system.	14	54	309	9	4	3	1.73	1.01	382
14. Some day be president of a national association of principals.	15	49	39	6	4	2	1.71	0.89	381
9. Become the school superintendent of a small school system.	16	57	31	9	2	1	1.60	0.84	382

*Items numbered according to order of appearance in the Career Aspirations Instrument and presented in order of decreasing mean response.

**Incomplete data due to non-response to the item.

of a small school system and the item with the third lowest rank concerns obtaining a large city school superintendency. These data indicate that moving to the top of the educational pyramid is of little or no interest to the huge majority of principals. The fact that becoming president of a national professional association had the second lowest mean score on the ranking of items indicates that this means of status improvement is also of slight interest to principals.

The finding that the item, "becoming a higher administrator in another school system," received such a relatively low ranking deserves emphasis for it indicates that principals generally prefer a number of other occupational moves to leaving their own school system for higher status positions.

The Measurement of LOA

The phenomenon of central interest in our investigation is the level of occupational aspiration (LOA) of school principals, which we have defined as their desire to attain higher level administrative positions in school systems.

For our summary measure of LOA we wanted an index which would meet three specifications: first, it would combine the responses of the principals to as many items as possible in the Career Aspirations Instrument that, on a face validity basis, had reference to their aspirations for higher administrative positions; second, it would indicate the relative position of individual principals along a continuum reflecting variation in their level of aspiration; and third, it would be based

only on those items that belonged to a dimension relatively independent of the principals' aspirations for improvement of their status as principals and for recognition in their professional associations.

In order to select items from the Career Aspirations Instrument for a summary measure of this kind, we submitted the principals' replies to the 16 items in the instrument to a principal components factor analysis. We then applied Kaiser's varimax rotation procedure[8] to the first three factors in the principal components solution. By maximizing the larger and minimizing the smaller loadings in the three-factor space, the varimax rotation provided a simple structure which eliminated many of the problems in the principal components solution arising from a single item loading moderately on more than one factor. We chose a three-factor rotation because the items in the instruments were designed to tap three general areas of their occupational aspirations.

We then interpreted the "meanings" of the three rotated factors according to the content of the items which loaded "significantly" on each factor. An item was considered to be relevant to the interpretation of the "meaning" of a given factor if it passed two selection criteria: first, the absolute value of its loading on the factor had to be greater than or equal to .50; and second, the absolute value of its loading had to be at least .20 greater than its loading on any other factor. The varimax loadings of all 16 items in the factor analysis are presented in Appendix B (Table B-1). Item loadings which meet the two criteria specified above are marked with an asterisk. An inspection of this table reveals three mutually exclusive and easily interpretable dimensions,

one for each of the general attitude areas the instrument was designed to tap.

Of the three factors, only the first is of immediate relevance for consideration of measurement of LOA. The four items that loaded "significantly" on this factor all deal with the principals' aspirations for higher level administrative positions. These four items, their loadings on Factors I, II, and III, and the means and standard deviations of the principals' responses to them are presented in Table 2-5. To obtain a summary measure of Level of Occupational Aspiration from the responses of the principals in the sample, we used the loadings for these four items as weights in a factor scoring procedure called Harmon's "shortened" method.[9]

If we had used face validity as the basis for item selection, we would have chosen five items for inclusion in the LOA measure: the four presented in Table 2-5 and a fifth one which dealt with the principals' desire to obtain a higher administrative position in their present system (item 5, Table 2-4). This fifth item was not included in our measure of LOA since it had high loadings on both Factor I and Factor II and hence did not meet our second criterion for selection of items to be included in factor scores.

In using the LOA score for men principals in this inquiry, we consider it to be a continuous variable with a mean of 3.56, a standard deviation of 2.45, and a range of 12.13. To facilitate interpretation of the findings, we shall separate the men principals into three categories ("low," "moderate," and "high") according to their LOA scores.

Table 2-5. Means, Standard Deviations, and Factor Weights of the Four Items in the Level of Occupational Aspirations Factor (Factor I) and Their Weights on Factors II and III

Item*	Mean	Standard Deviation	Factor Weights		
			I	II	III
How desirous are you to [(1) I would not want to, (2) I am not especially anxious to, (3) I have some desire to, (4) I would very much like to, (5) I am extremely anxious to]:					
6. Obtain a higher administrative position in some other school system.	1.81	0.96	0.66	0.30	0.17
7. Become an assistant or deputy superintendent of schools in a large city system.	2.05	1.17	0.74	0.29	0.20
8. Become the school superintendent of a large city system.	1.61	0.96	0.76	0.23	0.19
9. Become the school superintendent of a small school system.	1.51	0.81	0.75	0.11	0.13

*Items numbered according to order of appearance in the Career Aspirations Instrument.

To obtain some insight into what is meant when we classify principals as relatively "high," "moderate," or "low" in LOA, the responses of the 382 men principals to the four questions that were used in developing the LOA score were tabulated for each of the three levels of LOA (Table 2-6). In question 6, each of the principals was asked, "How desirous are you of obtaining a higher administrative position in some other school system?" Eighty-seven per cent of the principals classified as "low" in LOA responded "I would not want to" as compared to six per cent who were classified as "high." In question 4, the principals were asked, "How desirous are you of becoming the school superintendent of a large city system?" One hundred per cent of the principals "low" in LOA replied "I would not want to" in comparison to 12 per cent who were in the "high" category. Similar differences between principals categorized as "high," "moderate," and "low" in LOA can be observed through examination of the other items in Table 2-6.

Statistical Models and Statistical Inference

In later chapters we shall present findings about the relationship of LOA to many variables which can be thought of as either its determinants or its consequences. Our strategy of statistical analysis will not be to ascertain how well other variables predict the LOA score or how well it predicts scores on oth[illegible]ables, but rather to ascertain whether the specified independent and dependent variables are related. We shall leave to later investigations the task of determining the independent and joint contribution of variables to the prediction of LOA.

Table 2-6. Percentage Distribution, Mean, and Standard Deviation of the Responses of 382 Men Principals to the Four Items of the LOA Score by Three Classifications of Their LOA Level

The Question	The Response Choices and Weights
How desirous are you of doing the following things?	1 = I would not want to. . . . 2 = I am not especially anxious to. . . . 3 = I have some desire to. . . . 4 = I would very much like to. . . . 5 = I am extremely anxious to. . . .

Item*	Level of LOA	Per Cent of Principals Responding					Mean	Standard Deviation	N
		1	2	3	4	5			
6. Obtain a higher administrative position in some other school system.	High	6	33	38	16	7	2.86	1.00	108
	Mod.	25	65	7	3	-	1.90	0.67	147
	Low	87	13	-	-	-	1.13	0.34	127
7. Become an assistant or deputy superintendent of schools in a large city system.	High	1	14	32	32	21	3.57	0.99	108
	Mod.	7	68	23	2	-	2.19	0.59	147
	Low	87	13	-	-	-	1.13	0.34	127
8. Become the school superintendent of a large city system.	High	12	34	27	15	12	2.81	1.19	108
	Mod.	44	53	3	-	-	1.60	0.56	147
	Low	100	-	-	-	-	1.00	0.00	127
9. Become the school superintendent of a small school system.	High	19	40	30	7	4	2.40	1.02	108
	Mod.	52	47	1	-	-	1.50	0.53	147
	Low	97	3	-	-	-	1.03	0.18	127

*Items numbered according to order of appearance in the Career Aspirations Instrument.

The zero-order analyses to be presented may be classified into two types: those in which we will test hypotheses and those in which we shall explore whether certain variables are associated with LOA.

In testing hypotheses about possible determinants of LOA, we shall divide each independent variable into approximate thirds or quarters and then compare the mean LOA scores of the administrators in the "highest" and "lowest" categories. To test whether or not a monotonic trend found in our sample could, in fact, exist in the population from which it was drawn, we shall test the null hypothesis that the difference between the two means is zero. For purposes of coming to a conclusion about an hypothesis, we shall require that the relationship be significant statistically at below the .05 level, using a one-tailed test. For those analyses, in which our objective is not to test hypotheses, but to explore whether the specified variables are related to LOA, we shall use two-tailed tests of significance in order to come to a decision about whether a relationship is statistically significant at below the .05 level.

As noted in Chapter 1, our study of the level of occupational aspirations of principals will be restricted to men administrators. We assumed that the LOA of women principals would be considerably lower on the average than that of men, and the data support this assumption (Table 2-7): over twice the proportion of women than men (62 per cent versus 28 per cent) had low scores on our index of LOA and over twice the percentage of men than women (40 per cent versus 16 per cent) obtained high LOA scores. There were two major reasons for limiting the study to male administrators. The first was that most of the hypotheses we wished to

Table 2-7. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Sex

(N = 501)

Sex	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Male	40%	32%	28%	3.55	2.44	382
Female	16	22	62	2.04	2.02	119

$t_{(M-F)} = 6.13$; $p < .001$, one-tailed test.

test about determinants of LOA were based on assumptions about conditions and circumstances that would have a bearing on the occupational aspirations of male, but not female, administrators. The second reason was methodological in nature: in view of the strong association between sex and LOA, it would have been necessary to control for the sex variable in most analyses, but as Table 2-7 indicates, there were only 19 women in the "high" LOA group and 26 in the "moderate" category. The small number of cases in two of the three categories of LOA would have imposed serious restrictions on our interpretation of findings involving women principals.

Another methodological point that deserves comment involves our decision not to undertake separate analyses of the LOA of elementary, junior high, and senior high school principals. If there were statistically significant differences in the mean LOA scores of these groups of principals, then we felt that it would be necessary to conduct our examination of the determinants of LOA for each school level. However as we shall demonstrate in Chapter 3, men who serve as elementary, junior high, and senior high school principals do not differ significantly in their LOA, and hence we decided that it would not be necessary to carry out separate sets of analyses for each school level.

The final methodological point pertains to the emphasis placed on zero-order relationships in this report. In view of the limited knowledge about correlates of the level of occupational aspiration of principals, the design of the study gave priority to the analysis of these types of relationships. Several "contextual" analyses were undertaken,

but they revealed that the introduction of third variables did not alter zero-order relationships when LOA was treated as an independent or as a dependent variable. At a later time, it is planned to undertake additional "third variable" analyses in an effort to determine what influence, if any, other variables may have on the zero-order relationships examined in the present report.

Notes and References for Chapter Two

1. The first section of this chapter, pages 2-1 - 2-9, is a summary of the research procedures of the National Principalship Study that have been reported in detail in earlier publications. See especially, Neal Gross and Robert E. Herriott, Staff Leadership in Public Schools: A Sociological Inquiry (New York: John Wiley & Sons, Inc., 1965), Chapter II.

2. The LOA inquiry was restricted to the 382 men principals in the sample for reasons discussed in the final section of this chapter. The National Principalship Study also obtained a large body of data from higher administrators and teachers. Teacher data will be employed in the analyses to be presented in Chapter 7; information about the sample of teachers and the procedures used to obtain data from them will be presented in that chapter.

3. For an excellent treatment of some of the theoretical and methodological issues of scaling see Warren S. Torgerson, Theory and Methods of Scaling (New York: John Wiley & Sons, Inc. 1958).

4. The most efficient Guttman scaling procedure available in 1960 and the one used by the National Principalship Study was Stone's extension of Ford's rapid scoring procedure. See Carol L. Stone, "A Machine Method for Scaling as Many as Twelve Dichotomies," Washington Agricultural Experiment Station Circular 329 (Pullman: Institute of Agricultural Sciences, State College of Washington, 1958). Also see Chad Gordon, "A Note on Computer Programs for Guttman Scaling," Sociometry, XXVI (1963), pp. 129-130.

5. For one discussion of factor analysis, see Harry H. Harman, Modern Factor Analysis (Chicago: University of Chicago Press, 1960); for a computer program for performing principal components factor analysis, see William W. Cooley and Paul R. Lohnes, Multivariate Procedures for the Behavioral Sciences (New York: John Wiley & Sons, 1960), pp. 173, 176-178.

6. See Henry F. Kaiser, "The Varimax Criterion for Analytic Rotation in Factor Analysis," Psychometrika, XXIII (1958), pp. 187-200; Henry F. Kaiser, "Computer Program for Varimax Rotation in Factor Analysis," Educational and Psychological Measurement, XIX (1960), pp. 413-420; or Cooley and Lohnes, op. cit., pp. 174-175, 179-182.

7. See Henry F. Kaiser, "Formulas for Component Scores," Psychometrika, XXVII (1962), pp. 33-27.

8. Ibid., pp. 33-37.

9. See Harman, op. cit., Chapter XVI.

Chapter 3: Social Identities and Level of Occupational Aspiration

A sociological perspective toward possible determinants of the level of occupational aspiration of men school principals directs attention to certain of their social identities that might influence their LOA. Two kinds of social differentiation based on biological circumstances immediately came to mind: age and race. Does the level of aspiration of principals vary with age? Do Negroes differ from whites? Another basis for sorting individuals is by their religious identification. Sociological inquiries[1] have shown that religion has important effects on attitudes and conduct. Are the levels of aspiration of Protestant, Catholic, and Jewish principals different? Principals also vary in their socio-economic origins and this circumstance, too, might influence their LOA.

In this chapter we present our findings about the relationships of the age, race, religion, and socio-economic backgrounds of principals to their LOA. In addition, we shall inquire about the effects on LOA of two circumstances reflecting social status distinctions among principals in their world of work: first, the highest academic degree they had achieved and second, the level of school principals manage, i.e., whether they are administrators of elementary, junior high, or senior high schools.

Age

The hypothesis we tested was that age would be negatively related to the level of occupational aspiration of male principals. It was

based on the following assumptions: first, older principals have less time remaining in their careers to achieve upward vertical mobility than younger ones; and second, the older the principal, the greater the likelihood that he would have experienced the condition of having been "passed over" for promotion earlier in his career. We further assumed that the shorter the time period prior to retirement in which a person has the opportunity to be mobile and his exposure to the experience of having been "passed over" would tend to depress an individual's level of aspiration. It follows from this line of reasoning that the younger the principal the higher his LOA.

Table 3-1 shows the relationship between the age of the principals and their level of aspiration, and it reveals that level of aspiration does decline with increasing age. Forty per cent of the principals in the youngest age group (under 46 years of age) had the highest scores on our index of level of aspiration in comparison with 34 per cent of those who were in the middle age group (46 - 55) and 17 per cent who were 56 years of age or older. Those who were in the youngest age category had a mean LOA score of 4.22 as compared to 2.88 for the mean LOA of the oldest principals. The difference of 1.34 is significant statistically. We conclude, therefore, that the evidence supports the hypothesis.

Race

Of the 382 male principals nine per cent were Negroes. Did they on the average tend to have lower or higher levels of aspiration than the white principals? The hypothesis we formulated in answer to this

Table 3-1. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Age

(N = 382)

Age	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Under 46	25%	35%	40%	4.22	2.58	72
46-55	20	46	34	3.95	2.25	156
56 and older	50	33	17	2.88	2.43	154

$t_{(L-H)} = 3.18$; $p < .001$, one-tailed test.

question was based on two lines of reasoning. The first was linked to reference group theory.[2] We assumed that although the amount of occupational mobility achieved by Negro and white principals during the course of their educational careers was the same, their assessment of their relative achievement would be different. That is, we reasoned that Negro principals would tend to evaluate their occupational advancement more positively than whites because in both relative and absolute terms the number of males in the occupational structure whose income and prestige is greater than that of a principal's is considerably less among Negro than white principals. If, as we further assumed, among a set of individuals who serve in the same position, those who evaluate their career progress more favorably will be less inclined to aspire to higher status positions than those who assess their's less favorably, then it follows that Negro principals will have a lower level of occupational aspiration than white principals.

The second line of reasoning was based on the assumption that an individual's perception of the opportunity to advance in an occupational system influences his level of aspiration. Since at the time of our study only a handful of higher administrators in large city school systems were Negroes, we assumed that Negro principals would perceive less opportunity for their promotion to higher administrative positions than white principals and hence Negro principals would less frequently aspire to positions of greater responsibility in the school system.

From both lines of reasoning it follows that: Negro principals will have a lower level of occupational aspiration than white principals.

When the race of principals is cross-tabulated with their LOA scores, the findings do not support the hypothesis (Table 3-2): although the mean LOA score of the white principals in our sample is higher than than of the Negro administrators (3.61 versus 3.01), the difference between their mean scores is not significant statistically at below the .05 level (the criterion we have adopted to claim support for hypotheses). We, therefore, interpret these findings as indicating no significant race differences in LOA.

Religion

To this point we have found that the age of principals does have a bearing on their level of aspiration but that race does not. Now we turn to another of their social identities that might exert an impact on their LOA: religion.

As we speculated about the kind of relationship that might be anticipated between religion and the LOA of principals, we found that equally plausible lines of reasoning could readily be developed in support of contrary predictions.

If, as other studies[3] suggest, members of the Jewish faith, on the average, tend to place the greatest stress on occupational advancement and Catholics the least, then we would anticipate that the level of occupational aspiration would be highest for the Jewish principals, next highest for the Protestants, and lowest for the Catholics. If, however, we assumed that Jews and Catholics would perceive that their religious identities would lessen their opportunities for occupational advancement,

Table 3-2. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Race

(N = 382)

Race	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
White	33%	37%	30%	3.61	2.51	349
Negro	31	59	10	3.01	1.54	33

$t_{(W-N)} = 1.33$; $p > .07$, one-tailed test.

Table 3-3. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Three Categories of Religion

(N = 365)*

Religion	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Protestant	34%	40%	26%	3.42	2.36	278
Catholic	30	29	41	3.92	2.27	51
Jewish	19	42	39	4.57	2.86	36

* Data unavailable for 17 cases.

$F = 3.53$; $p < .04$.

then we would expect that Protestant principals would express the highest LOA. It could also be argued that the Catholic principals in our sample represent atypical members of their religious group because, although their Church supports its own school system, they chose to enter the field of public education. Similarly, Jews who enter the field of public education could represent an atypical set of members of their faith with respect to their values and attitudes toward social mobility.

What do the findings reveal when we examine the relationship of religion to the LOA of principals? The findings in Table 3-3 show that Jewish principals obtain the highest mean LOA score, the Catholic principals the next highest, and the Protestant principals the lowest and that the differences in their average LOA scores are statistically significant.

It is of interest to note, however, that it would be incorrect to conclude from this finding that the proportion of Jewish principals with the highest level of aspiration scores is greater than that for Catholic principals for a slightly higher percentage of the Catholic than Jewish administrators (41 per cent versus 39 per cent) were in the highest LOA category. The findings in Table 3-3 indicate that the difference between the mean LOA scores of the Jewish and Catholic principals is attributable to the larger percentage of Jewish administrators who are "moderate" in their LOA and the smaller percentage who are in the lowest LOA category.

Socio-economic Background

The question we now examine is whether the location of the principal in the social stratification system when he was an adolescent, as indexed by his father's socio-economic status, is associated with his occupational aspiration.

A considerable number of sociological studies have found that the level of educational and occupational aspirations of high school students is influenced by their social class backgrounds: the higher the socio-economic status of their families, the more they aspire to attend college or to enter occupations of higher status.[4] The relationship between social class origins and level of occupational expectations also appears to persist among college students. Rosenberg[5] found that there was a positive relationship between father's current income and the amount of money college students expect to earn in the future: nine-tenths of the students whose fathers had the highest incomes expected their earnings to exceed $10,000 ten years after graduation in comparison with one-third of those with fathers in the lowest income group. His findings also reveal that the higher the father's income the more likely the student planned to enter a high status occupation: over seven out of 10 of the wealthiest students planned to enter law, medicine, or some business occupation as compared to less than four out of 10 of the poorest students.[6]

Davis[7] found that the socio-economic background of college students was also positively related to their plans to attend graduate school immediately after graduation: 40 per cent of the students reporting

parental incomes of $20,000 or more indicated they were going on the following year as compared to 20 per cent of those reporting $5,000 or less. These studies, then, suggest that prior to entering the labor market, the socio-economic status of a student's family is positively related to his educational and occupational aspirations.

We have little knowledge, however, about the influence of social origins on the mobility aspirations of men after they enter a career line in most occupational areas. For the career line that is our focus of interest, the one in public education, Mason's study of beginning teachers does, however, provide information on the relationship between social origins and the occupational plans of men at the beginning of their careers.[8] His findings reveal that in the case of beginning male teachers the occupation and education of their fathers had no apparent relationship with a number of dimensions of their career plans. Our data permit us to inquire whether the social class background of former men teachers who have remained in education and moved up on its stratification ladder to the principalship is associated with their desire for further upward mobility.

It could be argued that principals from relatively high socio-economic backgrounds will express a higher LOA than those who came from families of lower socio-economic status. Such an hypothesis would be based on the following reasoning: among men who have experienced the same degree of occupational mobility, they will vary in their relative gratification with their occupational advancement because of the different comparative standards they use in assessing it. If men use their

fathers' location in the system of social stratification as a basis of comparison in evaluating their own achievements, then it would follow that the sons of blue-collar workers would experience greater status gratification from serving as principals than the sons of fathers with higher status occupations. If we further assume that feelings of status deprivation lead to higher aspiration levels, then we would expect that the socio-economic origins of principals would be positively related to LOA.

However, this line of reasoning disregards the possibility that most individuals from relatively high socio-economic backgrounds who enter a field of employment such as public education may de-emphasize status considerations in their career plans. Their selection of education as their career choice may indicate their downgrading of the "importance of getting ahead." It also could reflect a relatively low assessment of their own capabilities, a circumstance that could also be anticipated to lead to low aspirations. Furthermore, individuals of low socio-economic origins who had moved up the educational ladder to the principalship might also constitute an atypical group of individuals. Their history of occupational mobility might reflect an especially strong achievement orientation. An hypothesis based on these assumptions would lead to the prediction of a negative relationship between the social class backgrounds of principals and their LOA.

A third possible hypothesis, and the one we though most plausible in view of Mason's findings[9] and therefore decided to test, is that the socio-economic origins of principals is not associated with their LOA.

It is based on the assumption that after individuals embark on a career line their socio-economic backgrounds exert little or no influence on their aspirations for occupational mobility.

To examine whether the socio-economic backgrounds of principals are related to their LOA, we shall use three separate indices of their social origins: father's education, income, and occupation. When we cross-tabulated father's education with the principal's level of aspiration, we found that the mean LOA scores of principals whose fathers had different amounts of formal education were not significantly different from each other (Table 3-4).

As a general indicator of the economic status of their fathers, we asked the principals: "What was the income position [in your community] of your parents at the time of your graduation from high school?" When we cross-tabulated their responses with LOA, we found no association between this index of socio-economic origins and level of aspiration (Table 3-5). Similar findings emerged when we investigated the relationship between father's occupation and LOA (Table 3-6).[10] We conclude from these three sets of findings that the null hypothesis receives support: the social origins of principals is not associated with their LOA.

Highest Academic Degree

Our hypothesis was that level of formal educational attainment achieved by the principal (as indexed by the highest academic degree received) would be positively related to his level of aspiration. It was based on three lines of reasoning. In the first place, we assumed

Table 3-4. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Father's Education

(N = 379)*

Father's Education	Principal's LOA Score: Low	Moderate	High	Mean LOA Score	Standard Deviation	Number of Cases
Did not attend high school	35%	40%	25%	3.46	2.43	164
Graduated from high school or some high school	29	42	29	3.62	2.21	130
Some college	32	34	34	3.89	3.00	41
Graduated from college	43	27	30	3.29	2.43	44

* Data unavailable for three cases.

F = 0.61; p > .50.

Table 3-5. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Father's Income Level at Time of Principal's High School Graduation

(N = 376)*

Father's Income Level	Principal's LOA Score: Low	Moderate	High	Mean LOA Score	Standard Deviation	Number of Cases
Lowest 25% of community	28%	44%	28%	3.63	2.36	54
Second lowest 25% of community	32	40	28	3.56	2.44	185
Second highest 25% of community	42	28	30	3.45	2.54	99
Highest 25% of community	24	53	23	2.54	2.25	38

* Data unavailable for six cases.

F = 0.07; p > .95.

Table 3-6. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Father's Occupation

(N = 358)*

Father's Occupation	Principal's LOA Score: Low	Moderate	High	Mean LOA Score	Standard Deviation	Number of Cases
Farmer	30%	40%	30%	3.58	2.63	70
Unskilled	46	36	18	3.09	2.24	22
Skilled or semi-skilled	38	35	27	3.46	2.40	111
Clerical or Sales	22	39	39	4.18	2.27	46
Professional or managerial	38	36	26	3.34	2.46	109

* Data unavailable for 24 cases

F = 1.72; p > .15.

that the higher the advanced degree achieved by the principal the greater he would perceive his opportunity to obtain a higher administrative position since a doctorate in recent years has increasingly become a prerequisite for moving into higher administrative circles of most large city school systems. Second, we assumed that among the principals in our sample, those who had expended the time, money, and energy to obtain a doctorate would be the administrators with the greatest drive for occupational achievement. And third, we assumed that among a group of individuals who occupied the same managerial position, those who had the highest academic credentials would feel the greater sense of relative deprivation with their current occupational status. Each of these circumstances -- perceived opportunity for advancement, drive for occupational achievement, and feelings of relative deprivation with current occupational status -- would, we also assumed, serve to heighten a principal's desire for upward mobility.

When the highest academic degree obtained by the principals is cross-tabulated with their LOA scores, the hypothesis receives support: 41 per cent of the principals with a doctorate in education or philosophy were in the highest LOA category as compared to 28 per cent of those with a master's degree and 11 per cent who had achieved only a bachelor's degree (Table 3-7). Principals with a doctorate had the highest mean LOA score (4.77) and those with a bachelor's degree, the lowest (2.04). The difference in their mean scores is significant statistically.

It deserves note, however, that the total semester hours of graduate education courses taken by the principals is not related to their

Table 3-7. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Highest Academic Degree Achieved by the Principal

(N = 382)

Highest Academic Degree	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Bachelor's	58%	31%	11%	2.04	1.33	19
Master's	34	38	28	3.47	2.36	320
Doctor's	14	45	41	4.77	2.75	43

$t_{(D-B)} = 4.10$; $p < .001$, one-tailed test.

LOA (Table 3-8). A similar finding occurs when we cross-tabulate the total number of courses in educational administration they had completed with their LOA scores (Table 3-9). Thus, we conclude that although formal academic attainment as indexed by highest degree achieved is positively associated with the level of aspiration of principals, the sheer quantity of advanced courses they had taken is not.

School Level

Of the 382 male principals, 40 per cent were principals of senior high schools, 34 per cent of junior high schools, and 26 per cent of elementary schools. There is little question that in the pecking order among school principalships, the high school principalship ranks highest and the elementary school principalship lowest. Do principals who administer different types of schools vary in their LOA?

A plausible argument could be advanced in support of the prediction that the level of school a principal administers would be inversely related to LOA. Thus, it could be maintained that elementary principals, because of their relatively low prestige as school administrators, would experience greatest dissatisfaction with their present occupational status, and therefore express the greatest desire for moving into higher administrator circles. On the other hand, it could be plausibly argued that since high school principals have the highest status and also the most frequent contacts with the top personnel of school systems, they might aspire more than junior high and elementary school principals to move up the educational ladder.

Table 3-8. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by the Number of Semester Hours of Graduate Education Courses Taken

(N = 382)

Number of Hours	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
00-30	36%	36%	28%	3.35	2.24	142
31-60	30	45	25	3.60	2.41	168
61+	34	31	35	3.80	2.81	72

$t_{(H-L)} = 1.26$; $p > .10$, one-tailed test.

Table 3-9. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by the Number of Semester Hours of Educational Administration Courses Taken

(N = 382)

Number of Hours	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
00-20	30%	46%	24%	3.45	2.21	169
21-40	36	34	30	3.49	2.47	154
41+	35	33	32	3.88	2.84	59

$t_{(H-L)} = 1.18$; $p > .12$, one-tailed test.

The findings reveal support for neither of these lines of reasoning (Table 3-10): although the elementary principals had a lower mean LOA score than that of the junior high and senior high school principals, the differences in their mean scores are not significant statistically. We interpret the data as indicating no relationship between the level of school principals administer and their LOA.

Table 3-10. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by School Level

(N = 382)

School Level	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Elementary	39%	36%	25%	3.23	2.28	98
Junior High	29	40	31	3.68	2.41	129
Senior High	33	39	28	3.67	2.58	155

$F = 1.24$; $p > .25$.

Notes and References for Chapter Three

1. See, for example, Gerhard Lenski, The Religious Factor: A Sociological Study of Religion's Impact on Politics, Economics, and Family Life (New York: Doubleday & Co., Inc., 1961); and Morris Rosenberg, Society and the Adolescent Self-Image (Princeton: Princeton University Press, 1965), Chapters 3 and 4.

2. For an excellent discussion of reference group theory, see Robert K. Merton, Social Theory and Social Structure (Glencoe: The Free Press, 1957), pp. 131-194.

3. Lenski, op. cit., Chapter 3.

4. For a review of a number of these studies, see Joseph A. Kahl, The American Class Structure (New York: Rinehart & Co., Inc., 1957), Chapter 10.

5. Morris Rosenberg, Occupations and Values (Glencoe: The Free Press, 1957), pp. 53-55

6. Ibid., p. 55.

7. James A. Davis, Great Aspirations (Chicago: Aldine Publishing Co., 1964), Chapter 3.

8. Ward S. Mason, The Beginning Teacher: Status and Career Orientations (Washington: U. S. Government Printing Office, 1961), p. 115.

9. Ibid.

10. In the calculation of the F-test, principals who reported their father's occupation as "farmer" were excluded from the analysis because of the difficulty of assigning a prestige ranking to this global occupational category.

Chapter 4: Career Decisions and Experiences and Level of Occupational Aspiration

The findings we presented in Chapter 3 focused on social identities of principals as possible determinants of their level of occupational aspiration. In this chapter we shift our attention to variations in their occupational orientations and differences in their job histories that we reasoned might influence their LOA.

The Decision to Become a Teacher

During the course of our interviews with the principals we explored in considerable detail the conditions surrounding their decision to embark on a career in education.[1] In response to the question, "Was teaching your first choice as an occupation?" over one-half of the administrators (53 per cent) indicated that it was not their first preference. When we asked these men what their initial preference was, they nearly always mentioned a vocation with higher status, for example, medicine or law. In explaining why they decided to enter teaching when it was not their first-choice occupation, most of them reported lack of finances to prepare for or to enter the preferred occupation. Does the level of aspiration of principals who did and did not have a strong interest in becoming teachers differ?

Our hypothesis was that principals for whom teaching had been their first vocational choice would have lower aspirations for occupational advancement, on the average, than those who had wanted to enter other occupations or professions. It was based on two lines of reasoning. In the first place, we assumed that since moving up the educational ladder

would further remove principals from the core functions of the school, teaching and learning, administrators with a strong initial liking for the classroom would be more reluctant than those who had indicated other occupational preferences to lose direct contact with instructional activities. Second, we reasoned that principals whose initial vocational choice was teaching would place less stress on occupational advancement than those who had wanted to enter occupations of higher social and economic status.

Table 4-1 reveals support for the hypothesis: the mean LOA score of principals for whom teaching had represented their first-choice occupation was lower than that for whom it had not constituted a first-choice occupation (3.27 versus 3.83), and the difference in their mean scores is significant statistically.

Satisfaction with Socio-economic Status as Teachers

We have seen that principals who had a strong desire to enter the field of public education tended to have lower scores on our measure of LOA than those who had other occupational preferences. Now we inquire whether those administrators who varied in their satisfaction with the socio-economic status of teaching after they entered the occupation also varied in their LOA. Our hypothesis was that their degree of satisfaction with their socio-economic status as teachers would be negatively related to their level of occupational aspiration. We reasoned that the administrators who had felt little dissatisfaction with their social and

Table 4-1. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Teaching as First-choice Occupation

(N = 374)*

Teaching as a First-choice Occupation	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
No	28%	42%	30%	3.83	2.52	197
Yes	39	36	25	3.27	2.34	177

* Data unavailable for eight cases.

$t_{(N-Y)} = 2.22$; $p < .02$, one-tailed test.

economic status as teachers would be the kind of individuals who place slight value on the extrinsic rewards of work whereas those who had been more dissatisfied with their socio-economic status as teachers would give greater emphasis to them; and if, as we further assumed, the more value individuals place on the extrinsic rewards of work the greater their level of occupational aspiration, then we would anticipate that the principals' satisfaction with their socio-economic status as teachers would be negatively associated with their LOA.

To test this hypothesis, a six-item Guttman scale was used as an index of the principals' satisfaction with their socio-economic status as teachers. Its coefficient of reproducibility was .923.[2] We had asked the principals: "Please think back to your last year as a full-time teacher and indicate how you felt [very satisfied, moderately satisfied, slightly satisfied, slightly dissatisfied, moderately dissatisfied, very dissatisfied] with:

1. The top salary then available for teachers.
2. My chances for receiving salary increases as a teacher.
3. The amount of recognition which teachers were given by society for their efforts and contributions.
4. The possibilities for a teacher advancing to a position of greater responsibility in teaching.
5. The amount of recognition which teachers were given by members of other professions.
6. The amount of recognition which non-educators gave to teachers as compared to what they gave to other professionals.

Table 4-2 presents the relationship between the principals' satisfaction with their socio-economic status as teachers and their LOA scores. It reveals that the findings are in the direction predicted by the hypothesis: the higher the degree of satisfaction with the socio-economic status of their former position as a teacher, the lower the principals' LOA. Whereas the principals with the highest satisfaction scores had a mean LOA score of 2.97, those with the lowest satisfaction scores had a mean LOA score of 3.83. This difference of 0.86 is significant statistically. We conclude, therefore, that there is a negative relationship between a principal's satisfaction with the socio-economic status of his former position as a teacher and his LOA.

Stress on Financial Considerations in Career Decisions

To this point we have isolated two circumstances in the principals' career history that are associated with their LOA: whether teaching was their first choice as a vocation and their satisfaction with their socio-economic status when they were employed as teachers. Now we examine an hypothesis about the influence on their future level of aspiration of the emphasis they place on financial considerations in their career decisions. We reasoned that individuals who place less stress on financial considerations in their career decisions would be less likely to find higher administrative positions attractive than those who do, and thus hypothesized that the former would tend to have a lower level of aspiration than the latter.

Table 4-2. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Three Levels of Satisfaction with Socio-economic Status as a Teacher

(N = 380)*.

Principal's Satisfaction with Socio-economic Status as a Teacher	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Low	29%	40%	31%	3.83	2.77	113
Moderate	32	35	33	3.69	2.35	178
High	42	43	15	2.97	2.11	90

* Data unavailable for two cases.

$t_{(L-H)} = 2.44$; $p < .01$, one-tailed test.

To test this hypothesis we shall use two sets of data. The first is the principals' responses to the question, "Why did you want to become a principal?" When we classify the educational administrators into two categories, those who did and did not mention financial considerations in their response to this question and examine their LOA scores, the hypothesis receives support (Table 4-3): 39 per cent of the principals who did not mention financial reasons for seeking the principalship were in the lowest LOA category in comparison with 28 per cent who did mention it. Furthermore, the mean LOA score (3.30) of the principals who did not mention financial reasons was lower than that of those who did (3.78), and the difference of 0.48 is significant statistically.

These findings offer some support for the proposition that the emphasis men principals place on improving their economic status may be one of the circumstances that accounts for variation in their LOA. However, some may argue that the fact that a principal indicated that a major reason for his aspiring to the principalship was to obtain greater income does not necessarily imply that "money" occupies an especially salient element in his system of values. After all, teaching is one of the lowest paid professions, and principals who mentioned "money" as a major motivating force for their seeking a principalship may simply have been expressing their concern about the necessity to meet the financial needs of their families. This is a reasonable argument, and it led us to analyze a second body of data available in the National Principalship Study.

During their interviews, the principals were asked to indicate

Table 4-3. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Financial Motive for Entering Principalship

(N = 378)*

Financial Motive for Entering Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
No	39%	36%	25%	3.30	2.37	177
Yes	28	41	31	3.78	2.51	201

* Data unavailable for four cases.

$t_{(Y-N)} = 1.90$; $p < .03$; one-tailed test.

whether they would be willing to accept ["definitely would," "probably would," "probably would not," "definitely would not"] the four following job offers, each of which would result in a substantial increase in salary but would also require them to leave the field of educational administration:

1. An administrative position with a reputable textbook company with a salary $4,000 greater than my present one.
2. An administrative position in the personnel department of a large industrial firm with a salary $4,000 greater than my present one.
3. A position as a faculty member in a school of education of a state university with a salary $2,000 greater than my present one.
4. A position as a full-time teacher with a salary $2,000 greater than my present one.

We reasoned that the principals' willingness to leave the field of educational administration for one of these four higher paying jobs would be indicative of the salience they attribute to financial considerations in their career decisions. Therefore, if our hypothesis is tenable, then we would expect to find that those administrators who are positively predisposed to accept each of the job offers would have a higher mean LOA score than the one obtained by those who had a negative orientation to accepting each position.

To examine the relationship between the principals' responses to each of these questions and their LOA scores, we first categorized them

into two groups: those who responded that they definitely or probably would accept the job offer and those who replied that they definitely or probably would reject it. The findings are presented in Tables 4-4, 4-5, 4-6, and 4-7. They reveal that for each of the job offers, the principals who stated that they definitely or probably would accept it had higher mean LOA scores than those who said they definitely or probably would not; and in each case the difference in the mean LOA scores of the two groups is significant statistically. We interpret these findings as offering support for the hypothesis.

Age at Time of First Principalship

The principals in our sample varied considerably in the age at which they achieved their first principalship, some obtaining it when they were under 30 years of age and others not until they were over 45. We anticipated that among the incumbents of the same managerial position those who achieved their occupational advancement at a relatively young age would have a greater yearning for further occupational mobility than those who obtained it at a relatively late age. We assumed that those selected when at a relatively young age would tend to feel, more than those appointed when they were older, that they had been earmarked by the higher administration as individuals of considerable administrative promise; hence, we set up the hypothesis that the earlier the age at which an administrator achieved the principalship the more he would aspire to move up the bureaucratic apparatus.

Table 4-4. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Willingness to Accept an Administrative Position with a Textbook Company at a Salary Increase of $4,000

(N = 380)*

Willingness to Accept the Position	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Definitely or probably accept	22%	42%	36%	4.16	2.56	128
Definitely or probably would not accept	39	37	24	3.24	2.33	252

* Data unavailable for two cases.

$t_{(A-NA)} = 3.52$; $p < .001$, one-tailed test.

Table 4-5. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Willingness to Accept a Position in the Personnel Department of a Large Industrial Firm at a Salary Increase of $4,000

(N = 381)*

Willingness to Accept the Position	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Definitely or probably accept	23%	41%	36%	4.01	2.53	145
Definitely or probably not accept	39	37	24	3.29	2.36	236

* Data unavailable for one case.

$t_{(A-NA)} = 2.81$; $p < .002$, one-tailed test.

Table 4-6. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Willingness to Accept Position as a Faculty Member of a School of Education at a Salary Increase of $2,000

(N = 380)*.

Willingness to Accept the Position	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Definitely or probably accept	26%	39%	35%	3.97	2.55	160
Definitely or probably not accept	38	38	24	3.27	2.33	222

* Data unavailable for two cases.

$t_{(A-NA)} = 2.78$; $p < .005$, one-tailed test.

Table 4-7. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Willingness to Accept a Position as a Public School Teacher at a Salary Increase of $2,000

(N = 382)

Willingness to Accept the Position	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Definitely or probably accept	24%	40%	36%	3.89	2.38	122
Definitely or probably not accept	38	38	24	3.41	2.47	260

$t_{(A-NA)} = 1.79$; $p < .04$, one-tailed test.

The data provide support for the hypothesis (Table 4-8): nearly twice the proportion of principals who achieved the principalship when they were under 35 had high LOA scores as compared to those who had obtained it when they were 47 or over (39 per cent versus 20 per cent). Furthermore, the mean LOA score steadily increases as the age when the administrators obtained their first principalship rises. The difference between the mean LOA scores of the principals who were youngest and oldest at the time they were appointed to the principalship is significant statistically.

It is possible, however, that the negative relationship between the age at which administrators achieve their first principalship (AFP) and their LOA may simply be a function of the circumstances that principal's age is positively related to AFP and negatively related to LOA. That is, if the administrators in our sample who achieved their first principalship at an earlier age also tend to be younger than those who obtained it at a later age; and if, as findings presented in Chapter 3 revealed, younger principals have a higher level of aspiration on the average than older ones, then the relationship between AFP and LOA might be attributable to the age differences of principals who obtained their first principalship at an earlier or later age.

To explore this possibility we first examined the association between AFP and age by computing a Pearsonian correlation between the two variables. The findings revealed that they were in fact positively associated and that the correlation coefficient was significant statistically ($r = .29$). We next computed a zero-order correlation

Table 4-8. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Age at Time of First Principalship

(N = 382)

Age at Time of First Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
34 or under	28%	33%	39%	3.80	2.33	102
35-40	27	46	27	3.71	2.47	94
41-46	36	40	24	3.49	2.44	110
47 or older	46	34	20	3.06	2.45	76

$t_{(L-H)} = 2.05$; $p < .02$, one-tailed test.

coefficient between AFP and LOA and found the correlation coefficient was negative and statistically significant ($r = -.10$).

When the linear effects of age on the zero-order relationship between AFP and LOA were removed through the statistical technique of partial correlation, the findings revealed that the coefficient of first-order partial correlation was -.04 which is not significant statistically. We conclude, therefore, that the negative relationship between AFP and LOA may be attributable to the fact that the administrators who obtained their first principalship at an earlier age are younger, on the average, than those who obtained it at a later age.

Length of Time in the Principalship

Among the male administrators in our sample there also was considerable variation in the number of years they had served as principals. Twenty-five per cent had served in this administrative capacity less than five years while a slightly larger proportion (27 per cent) had been a principal for 17 years or longer. Is length of time in the principalship associated with occupational aspirations?

Our hypothesis was that there would be a negative relationship between length of time in the principalship and LOA. It was based on the same kind of assumptions underlying our hypothesis about the association between age and LOA (Chapter 3): the longer an educational administrator had served as a principal, the shorter the time period available to him to move up the educational ladder and the greater the likelihood he would have experienced the circumstance of having been "passed over" for

promotion. We reasoned that both of these conditions would serve to decrease a principal's LOA.

Table 4-9 reveals support for the hypothesis: the proportion of principals with high LOA scores steadily decreases with longevity in the position, from 23 per cent with the greatest experience (over 17 years) to 34 per cent for those with the least experience (under 5 years). The mean LOA score of administrators who had been a principal for the longest period of time (3.08) is lower than that (3.94) of those who had served in that capacity for the shortest period, and the difference in their mean scores is significant statistically.

Can the negative relationship between the length of time the administrators have served as principals and their LOA be attributed to the relationship of age to each of these variables? When we examined the relationship between length of time in the principalship and the age of the administrators, we found that they were highly and positively correlated ($r = .60$). The zero-order correlation between length of service as a principal and LOA was -.14 which is significant statistically. When, through partial correlation, we removed the effects of age on the zero-order correlation between length of service and LOA, the coefficient of first-order partial correlation was -.03, which is not significant statistically. We conclude, therefore, that the negative association between experience in the principalship and LOA may be accounted for by the circumstances that age is positively associated with length of time in the principalship and negatively related to LOA.

Table 4-9. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Number of Years in the Principalship

(N = 382)

Number of Years in the Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Under 05	27%	39%	34%	3.94	2.61	96
05-09	30	39	31	3.83	2.57	97
10-16	33	42	25	3.41	2.27	88
17 or more	43	34	23	3.08	2.26	101

$t_{(L-H)} = 2.48$; $p < .01$, one-tailed test.

Notes and References for Chapter Four

1. For the report of the findings about circumstances involved in the decisions of elementary school principals to enter the field of education, see Neal Gross and Anne E. Trask, Men and Women as Elementary School Principals, Final Report No. 2, Cooperative Research Project No. 853, June 1964, Chapter 3.

2. See Appendix B, Table B-2, for technical details related to the development of the score, Principal's Satisfaction with His Socio-economic Status When a Teacher.

Chapter 5: Job Satisfaction and LOA

Among a set of individuals who have achieved a similar degree of upward mobility in a stratified career line such as our sample of men school principals, does the satisfaction they derive from their jobs have any bearing on their desire for further occupational advancement? Do the reactions principals perceive their wives have toward their occupational status have any influence on their LOA? It is these questions that we propose to examine in this chapter.

Empirical studies[1] of job satisfaction have revealed that it is a multidimensional phenomenon. That is, individuals may vary in the degree of satisfaction they derive from different aspects of their work, for example, its financial rewards, its social status, their relationships with their superiors, and duties associated with their job. This circumstance raises the possibility that some dimensions of the principals' satisfaction with work may be related to their level of occupational aspiration while others may not. We now turn to the hypotheses we tested about the relationship between a number of dimensions of the job satisfactions of principals and their LOA.

Satisfaction with Income Rewards of the Principalship

Men in the principalship vary considerably in their degree of satisfaction with its remuneration. Their different reactions to the income rewards of their work undoubtedly are a consequence of a variety of circumstances, for example, the financial needs of their families, the comparative reference groups they use in assessing their incomes, and their

standard of living. Regardless of the conditions that may account for their feelings of relative satisfaction or dissatisfaction with the remuneration of their occupation, it seems reasonable to assume that the more dissatisfied a principal is in this respect the more concerned he would be about improving his economic status; and since moving up the ladder of educational administration is the major route by which a principal can increase his economic status, we hypothesized that the greater his dissatisfaction with the income rewards of the principalship, the higher his level of occupational aspirations.

To test this hypothesis we used as an index of satisfaction with the income rewards of the principalship a summary measure based on the principals' responses to the two following questions: "How satisfied ["very satisfied," "moderately satisfied," "slightly satisfied," "slightly dissatisfied," "moderately dissatisfied," "very dissatisfied"] are you with: (1) the top salary nowadays available for principals, and (2) [your] chances for receiving salary increases as a principal?" Their responses were combined to form a two-item Guttman-type scale having a coefficient of reproducibility of .987.[2]

Table 5-1 reveals that the hypothesis receives empirical support: the greater a principal's dissatisfaction with the income rewards of his job, the higher his LOA score. Thirty-eight per cent of the administrators who are least satisfied with the salaries principals receive, as compared to 20 per cent who are most satisfied, have high level of aspirations scores. The difference of 1.01 between the mean LOA scores of those least and most satisfied with the income rewards of the principalship

Table 5-1. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Three Levels of Their Scores on Satisfaction with the Income Rewards of the Principalship

(N = 382)

Score on Satisfaction with Income Rewards of Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Low	25%	37%	38%	4.13	2.58	125
Moderate	32	39	29	3.58	2.53	94
High	41	39	20	3.12	2.21	163

$t_{(L-H)} = 3.57$; $p < .001$, one-tailed test.

(4.13 versus 3.12) is significant statistically.

A question that deserves immediate consideration in view of this finding is whether the salary a principal receives or his total income is also related to his occupational aspirations. If either of these variables is negatively related to the principals' LOA and also positively associated with their satisfaction with the income rewards of the principalship, then the findings reported in Table 5-1 might simply be an artifact of his current salary or total income. Furthermore, if the data reveal that principals' salaries or total income are not related to desire for occupational advancement, and since we know that their satisfaction with the income rewards of the principalship is, we could conclude that their work influence the level of aspirations of principals whereas their actual incomes do not. Table 5-2 tests the hypothesis that the principals' current salary is negatively related to their LOA scores. It shows that there is no significant relationship between the salary they receive and their aspirations for higher administrative positions. A similar conclusion emerges when we classify the principals by their total incomes and examine their LOA scores (Table 5-3). We interpret these findings as indicating that the relationship between the principals' satisfaction with the income rewards of their position and LOA cannot be accounted for by their current salary or total income; and we conclude that whereas the salary received by principals or their total income from all sources is not associated with aspirations for upward occupational mobility, satisfaction with the income rewards of the

Table 5-2. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Their Current Salaries as Principals

(N = 379)*

Current Salary as Principals	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Under $8,000	26%	42%	32%	3.70	2.27	57
$ 8,000 - $ 9,999	35	34	31	3.51	2.41	120
10,000 - 11,999	34	43	23	3.42	2.37	114
Over $11,999	33	36	31	3.78	2.73	88

*Data unavailable for three cases.

$t_{(L-H)} = -0.18$; $p > .50$, one-tailed test.

Table 5-3. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Their Total Income

(N = 379)*

Total Income	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Under $10,000	31%	35%	34%	3.80	2.65	80
$10,000 - $11,999	36	32	32	3.43	2.26	93
12,000 - 14,999	32	38	30	3.75	2.66	100
Over $14,999	33	47	20	3.37	2.25	106

*Data unavailable for three cases.

$t_{(L-H)} = 1.19$; $p > .11$, [illegible] tailed test.

principalship is: the greater their dissatisfaction with the economic rewards of the principalship, the higher their level of occupational aspirations.

Satisfaction with the Social Status of the Principalship

Now we examine whether the degree of gratification principals derive from the social status they perceive as associated with their positions is related to LOA. The hypothesis we tested is based on a line of reasoning similar to the one used in predicting a relationship between the principals' satisfaction with the income rewards of their occupation and their level of occupational aspiration. We assumed that among a group of individuals who have reached the same point in a career line, those who are more dissatisfied with the social status of the position will feel a greater need than those who are less dissatisfied with it to enhance their occupational status; and since upward vertical mobility along the educational administration ladder is the primary means by which principals can reduce their feelings of deprivation about their occupational status, we hypothesized that the principals' satisfaction with the social status of their administrative position would be negatively related to their LOA.

To test this hypothesis, we used as an index of their gratification with the social status of the principalship a summary measure based on their responses to the three following questions: How satisfied are you ["very satisfied," "moderately satisfied," "slightly satisfied," "slightly

dissatisfied," "moderately dissatisfied," "very dissatisfied"] with:

1. the amount of recognition which principals are given by society for their efforts and contributions.
2. the amount of recognition which principals are given by members of other professions.
3. the amount of recognition which non-educators give to principals as compared to that given to other professionals.

Their replies to these questions were combined to form a three-item Guttman-type scale having a coefficient of reproducibility of .990.[3] When this index of satisfaction with the social status of the principalship is cross-tabulated with the principals' LOA scores support is found for the hypothesis (Table 5-4): over twice the proportion of principals with the lowest degree of satisfaction were in the high LOA category as were those with the highest satisfaction (35 per cent versus 17 per cent). Those who were most satisfied with the social status of the principalship had the lowest mean LOA score (2.82) and those least satisfied with it the highest mean score (3.67), and the difference of 0.85 between their mean scores is significant statistically. We conclude that the principals' satisfaction with the social status of their occupation is negatively related to LOA.

Satisfaction with Opportunity the Principalship Provides to Maximize Incumbent's Capabilities

To this point we have considered the influence of the principals' satisfaction with the income rewards and social status of their

Table 5-4. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Three Levels of Their Scores on Satisfaction with the Social Status of the Principalship

(N = 382)

Score on Satisfaction with Social Status of the Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	33%	32%	35%	3.67	2.38	82
Moderately Low	31	40	29	3.65	2.79	111
Moderately High	27	44	29	3.62	2.29	124
Highest	49	34	17	2.82	2.08	65

$t_{(L-H)} = 2.27$; $p < .02$, one-tailed test.

administrative positions on their LOA and have found that their gratification with each of these extrinsic rewards of their occupation is negatively related to their level of occupational aspirations: the more dissatisfied they are with either the income rewards or social status of the principalship, the greater their LOA.

Now we turn to the effects on a principal's level of occupational aspiration of another dimension of satisfaction with work: the degree to which an incumbent of a job feels that it provides him with the opportunity to maximize his particular capabilities. That such variability in fact exists in our sample is evidenced by the responses of the principal to the following question: "How satisfied are you ["very satisfied," "moderately satisfied," "slightly satisfied," "slightly dissatisfied," "moderately dissatisfied," "very dissatisfied"] with the opportunity which the principalship provides for making use of [your] particular talents?" Thirty-nine per cent reponded "very satisfied," 44 per cent replied "moderately satisfied," and 17 per cent indicated that they were only "slightly satisfied" or expressed some degree of dissatisfaction about this matter. What effect does the principals' feelings about this circumstance of their work have on their level of occupational aspirations?

Our hypothesis was that a principal's satisfaction with the opportunity his job provides for the utilization of his special talents would be negatively related to his LOA. We assumed that principals who felt that their current job allowed them to maximize their capabilities would have serious reservations about leaving it, and hence would express a

relatively low desire for upward mobility. On the other hand, we assumed that those administrators who felt that the principalship provided them with little opportunity to utilize their talents would have little or no reluctance to leave it for positions of greater responsibility, assignments which they hoped would lead to the gratification of their unmet needs for self-actualization in their work.

When we cross-tabulated the satisfaction principals expressed with their jobs on the criterion, the extent to which it provided them with an opportunity to make use of their particular talents, with their LOA scores, the findings support the hypothesis (Table 5-5): the negative trend in the data is seen in column 4, which shows that the proportion of principals with the highest LOA scores decreases as the level of their satisfaction with this dimension of their work increases: 38 per cent of the principals who are least satisfied with the opportunity their jobs provided for them to make use of their capabilities are in the high LOA category as compared to 31 per cent who are "moderately satisfied" and 21 per cent who are "very satisfied." The difference between the mean LOA score of the "least satisfied" (3.94) and that of the "most satisfied" (3.15) is 0.79 units on our index of LOA. This difference is significant statistically, and therefore we conclude that the data support the hypothesis: there is a negative relationship between a principal's satisfaction with the opportunity his job provides for the use of his particular talents and his level of occupational aspirations.

Table 5-5. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Satisfaction with Opportunity the Principalship Provides for Maximizing Incumbent's Capabilities

(N = 382)

Satisfaction with Opportunity for Utilization of Capabilities	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Low	32%	30%	38%	3.94	2.82	63
Moderate	29	40	31	3.79	2.53	168
High	39	40	21	3.15	2.12	151

$t_{(L-H)} = 2.24$; $p < .02$, one-tailed test.

Satisfaction with Career Progress

Despite the fact that the men principals in our sample had all experienced similar amounts of occupational mobility in the field of public education, they varied in their feelings about the progress they had made in their professional careers. In response to the question, "How satisfied are you with the amount of progress that [you[have made in [your] professional career?" nearly a third of the administrators replied "very satisfied," less than a half answered "moderately satisfied," and nearly one out of five gave a response indicating a lower degree of satisfaction.

If, as it appears reasonable to assume, principals who are less satisfied with the progress they have made in their careers in education are individuals who place greater value on occupational advancement than those who are more satisfied with their career progress, and if the stress persons place on upward occupational mobility is positively related to their level of occupational aspirations, then it follows that principals' satisfaction with their career progress will be negatively related to their LOA.

When we examined the relationship between the principals' satisfaction with their career progress and their LOA scores, the data provided support for this hypothesis (Table 5-6). A smaller proportion (20 per cent of the administrators who were most satisfied with their career progress have high scores on LOA than those who were least satisfied with their occupational progress (33 per cent). Whereas the principals who expressed least gratification with their progress have a mean LOA

Table 5-6. Percentage Distribution, Mean, and Standard Deviation of the Pringincapls' LOA Scores by Satisfaction with Career Progress

(N = 382)

Satisfaction with Career Progress	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Low	29%	38%	33%	3.96	2.99	72
Moderate	30	39	31	3.67	2.39	186
High	41	39	20	3.17	2.14	124

$t_{(L-H)} = 2.15$; $p < .02$, one-tailed test.

score of 3.96, those who were most gratified with it have a mean LOA score of 3.17. The difference of 0.79 is significantly statistically. We conclude, therefore, that there is a negative relationship between a principal's satisfaction with his career progress and his LOA.

Satisfaction with the Higher Administration

Although he is the chief administrator of his school, the principal is at the same time subordinate and accountable to other administrative officials. Does his satisfaction with the higher administration of his school system influence his LOA?

Our hypothesis was that the greater the principal's satisfaction with the higher administration of his school system, the lower his LOA. We reasoned that a principal with positive attitudes toward his administrative superiors would be less predisposed than one with negative attitudes to seek another position; and we assumed that principals who were desirous of obtaining another position would also want to improve their occupational status. From these assumptions it follows that a principal's satisfaction with the higher administration of his school system would be negatively related to his LOA.

To test this hypothesis, and eight-item Guttman scale with a coefficient of reproducibility of .931 was developed to measure the principals' satisfaction with the higher administration of their school systems.[4] It was based on their responses to the following eight items:

"How do you feel about:

1. The manner in which the principals and the higher administration

work together in this school system.

2. The extent to which I am informed by my superiors about school matters affecting my school.
3. The present method employed in this school system for making decisions on teacher discipline matters.
4. The level of competence of my superiors.
5. The cooperation and help which I receive from my superiors.
6. The evaluation process which my superiors use to judge my effectiveness as a principal.
7. The extent to which the professional growth of principals is subsidized by this school system.
8. The amount of time made available by my superiors for my personal professional growth."

When our index of the principals' satisfaction with the higher administration of their school system is cross-tabulated with the principals' own LOA scores, the hypothesis receives support (Table 5-7). The negative trend in the data is seen in the mean LOA scores in column 5; it is also revealed in column 4 which shows the proportion of principals highest in LOA at four different levels of the principals' satisfaction with their administrative superiors. A comparison of the principals who expressed the lowest and highest satisfaction with the higher administration reveals that 36 per cent of the former in contrast to 15 per cent of the latter had the highest LOA scores. The difference of 0.90 between the mean LOA score of the highest group (3.97) and that of the lowest group (3.07) is significant statistically, and therefore we conclude

Table 5-7. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Scores on Satisfaction with the Higher Administration

(N = 382)

Score on Satisfaction with the Higher Administration	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	27%	37%	36%	3.97	2.52	100
Moderately Low	26	41	33	3.87	2.50	86
Moderately High	41	33	26	3.24	2.41	121
Highest	39	46	15	3.07	2.22	75

$t_{(L-H)} = 2.46$; $p < .01$, one-tailed test.

that satisfaction with the higher administration is negatively associated with LOA.

Intrinsic Job Satisfaction

What about a principal's intrinsic job satisfaction - the degree of enjoyment he derives from performing the duties that constitute the content of his work? Is it also related to his level of occupational aspiration? The hypothesis we tested was that the greater the intrinsic job satisfaction of a principal, the lower his LOA.

We assumed that principals who derived considerable satisfaction from the performance of their duties as the administrator of an individual school would view higher administrative positions as relatively unattractive assignments because they would no longer be able to perform the kind of activities they especially enjoy if they were incumbents of higher level administrative positions. For principals, however, who experienced little pleasure from their present duties, we assumed that they would view higher administrative posts as relatively attractive jobs because the activities of higher administrators are quite different from their own, and if they served in such capacities they no longer would be required to carry out tasks that gave them little intrinsic job satisfaction. If we further assume that among the incumbents of the same position those who view higher level positions as more attractive will have a higher level of occupational aspirations, then it follows that the intrinsic job satisfaction of principals will be negatively related to LOA.

To test this hypothesis, an index of the principals' intrinsic job

satisfaction was developed from the principals' replies to an Enjoyment of Work Activities Instrument based on 26 aspects of their job. In responding to it, they were asked how much they enjoyed ["a great deal," "very much," "somewhat," "very little," "not at all"] each of the specified work activities. When the principals' responses to this instrument and another one dealing with conditions of their work and career were factor analyzed, three factors were isolated,[5] and one of them was designated as Intrinsic Job Satisfaction. Twenty of the 26 items in the Enjoyment of Work Instrument had high loadings on this factor and low loadings on the other two.[6]

When the principals' scores on this factor are cross-tabulated with their LOA scores, the findings do not support the hypothesis (Table 5-8). Contrary to our prediction, the principals who were lowest in intrinsic job satisfaction have the lowest mean score (3.31) on LOA and those with moderate intrinsic job satisfaction have the highest mean LOA score (3.76). We conclude, therefore, on the basis of these findings that the hypothesis that intrinsic job satisfaction is negatively related to LOA must be rejected. Furthermore, since an F-test revealed that the three mean LOA scores reported in Table 5-8 are not significantly different from each other statistically, we also conclude that the findings indicate support for the null hypothesis.

Table 5-8. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Three Levels of Their Intrinsic Job Satisfaction Scores

(N = 382)

Intrinsic Job Satisfaction Score	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Low	40%	36%	24%	3.31	2.25	128
Moderate	24	44	32	3.76	2.27	127
High	36	35	29	3.62	2.79	127

$t_{(L-H)} = -0.96$; $p > .67$, one-tailed test.

$F = 1.25$; $p > .25$.

The Principals' Perceptions of Their Wives' Satisfaction with Their Occupational Status

The social and economic status of married women in American society is primarily a function of the prestige and income associated with the social ranking of their husband's occupation. Furthermore, the amount of a married man's income in large part determines the standard of living and style of life of his family. These two effects on families of the socio-economic status of a man's job suggest that the reactions of a principal's wife to his occupational status may have a bearing on his level of occupational aspiration. If she is dissatisfied with her husband's income and occupational status and expresses her feelings to him, he then will be exposed to an external pressure to upgrade them. If, on the other hand, she is quite happy with the paycheck he brings home and his social status or is somewhat dissatisfied about these matters but never makes her husband aware of her feelings, then a principal will not experience pressures of this kind.

To test the hypothesis that a principal's perception of his wife's satisfaction with his socio-economic status is negatively related to his LOA, we asked the married men in our sample how their wives reacted to three aspects of their work. The first deals with his wife's feelings about the adequacy of his salary in view of the financial needs of his family. In response to the question, "How does your wife feel about your salary in terms of the financial needs of your family," the principals responded as follows:

	Per Cent Responding
Not irritated	32%
A little irritated	29
Somewhat irritated	23
Greatly irritated	16

When the principals' replies to this question are cross-tabulated with their LOA scores (Table 5-9), the findings reveal that over three times the proportion of principals who responded that their wives were "greatly irritated" about their salaries have high LOA scores as compared to those who responded that their wives expressed no irritation in this respect (46 per cent versus 13 per cent). The difference between the mean LOA scores of the principals who reported that their wives were "greatly irritated and those who reported "no irritation" about their current income is in the predicted direction and is significant statistically. We conclude that the principal's perception of his wife's satisfaction with his income is negatively related to his LOA.

The second area we examined was the principals' views of their wives feelings about their chances for occupational advancement. In reponse to the question, "How does your wife feel about the opportunity for your promotion," the principals responded as follows:

	Per Cent Responding
Not irritated	65%
A little irritated	20
Somewhat or greatly irritated	15

Table 5-9. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Wives' Feelings About the Adequacy of Their Salary

(N = 343)*

Wife's Feelings About Principal's Salary	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Greatly Irritated	29%	25%	46%	4.32	2.89	55
Somewhat Irritated	20	42	38	4.06	2.33	80
A Little Irritated	27	44	29	3.61	2.12	98
Not Irritated	48	39	13	2.77	2.21	110

*Data unavailable for 39 cases.

$t_{(H-L)} = 3.82$; $p < .001$, one-tailed test.

Table 5-10 reveals that those principals who reported that their wives express no concern over the lack of opportunity for promotion have the lowest mean LOA scores whereas those who indicated that their wives are most irritated have the highest LOA scores. The difference in their mean scores (3.05 versus 4.64) is again significant statistically.

The third area focused on the principals' perceptions of their wives' feelings about the prestige accorded them as school principals. We asked the principals two questions about this matter: first, "How does your wife feel about the prestige [accorded you] by the residents of your school community," and second, "How does your wife feel about the prestige [accorded you] by the residents of the area in which you live?" Tables 5-11 and 5-12 present the findings when we cross-tabulated the principals' responses to these two questions with their LOA scores. The data in each table reveal that those principals who responded that their wives felt some degree of irritation about the prestige accorded their husbands have a higher LOA mean score than those who reported that their wives did not express feelings of this kind; the findings in both tables are significant statistically. We conclude, therefore, on the basis of these four sets of findings that the more a principal perceives his wife is satisfied with his socio-economic status, the lower his LOA.

In this chapter we have examined the relationship between several dimensions of job satisfaction and LOA. We found that the following aspects of job satisfaction were negatively related to a principal's level of occupational aspiration: satisfaction derived from (1) the

Table 5-10. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Wives' Feelings About Their Chances for Occupational Advancement

(N = 330)*

Wife's Feelings About Chances for Occupational Advancement	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Somewhat or Greatly Irritated	20%	29%	51%	4.64	2.81	49
A Little Irritated	18	41	41	4.29	2.42	66
Not Irritated	41	40	19	3.05	2.15	215

*Data unavailable for 52 cases.

$t_{(H-L)} = 4.40$; $p < .001$, one-tailed test.

Table 5-11. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Wives' Feelings About the Prestige Accorded Them as Principals by the Residents of Their School Community

(N = 303)*

Wife's Feelings About Prestige of Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Somewhat or Greatly Irritated	27%	32%	41%	3.99	2.27	73
Not or Little Irritated	36	42	23	3.29	2.28	230

*Data unavailable for 79 cases.

$t_{(H-L)} = 2.29$; $p < .02$, one-tailed test.

Table 5-12. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Wives' Feelings About the Prestige Accorded Them by Residents of the Area in Which They Live

(N = 296)*

Wife's Feelings About Prestige of Principalship	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Somewhat or Greatly Irritated	31%	27%	42%	3.97	2.53	52
Not or Little Irritated	35	42	23	3.33	2.23	244

*Data unavailable for 86 cases.

$t_{(H-L)} = 1.83$; $p < .03$, one-tailed test.

income rewards of the principalship; (2) the social status of his occupation; (3) the opportunity his job provides to maximize his capabilities; (4) his career progress; (5) his relationships with the higher administration. Contrary to our prediction, we found no relationship between intrinsic job satisfaction and the principal's LOA. We also discovered that a principal's perception of his wife's satisfaction with his socio-economic status is negatively related to his level of occupational aspiration.

Notes and References for Chapter Five

1. See, for example, Daniel Katz, "Morale and Motivation in Industry," Wayne Dennis (Editor), Current Trends in Industrial Psychology (Pittsburgh: University of Pittsburgh Press, 1949), pp. 159-161; Nancy C. Morse, Satisfactions in the White-Collar Job (Ann Arbor: University of Michigan Press, 1953, pp. 14-20. For a review of the literature on correlates of job satisfaction, see Frederick Herzberg, et al., Job Attitudes: Review of Research and Opinion (Pittsburgh: Psychological Service of Pittsburgh, 1957). For the findings of the National Principalship Study on determinants of job and career satisfaction, see Neal Gross and David A. Napior, The Job and Career Satisfaction of Men School Principals, Final Report, Cooperative Research Project No. 2536, June 1967.

2. See Appendix B, Table B-3, for technical details related to the development of the score, Satisfaction with the Income Rewards of the Principalship.

3. See Appendix B, Table B-4, for technical details related to the development of the score, Satisfaction with the Social Status of the Principalship.

4. See Appendix B, Table B-5 for technical details related to the development of the score, Satisfaction with the Higher Administration.

5. For the technical details related to the development of summary measures of intrinsic job and career satisfaction, see Gross and Napior, op. cit., Chapter 3. The Enjoyment of Work Activities Instrument is presented in Appendix A-2.

6. For the item means, standard deviations, and weights used in computing the factor score, Intrinsic Job Satisfaction, see Appendix B, Table B-6.

Chapter 6: Self-conceptions, Value Orientations, and Level of Occupational Aspiration

In the previous chapter we examined a number of hypotheses about the effects on LOA of a principal's feelings about his work and career. In the first part of this chapter we address ourselves to the question of whether his assessment of his own abilities as an educational administrator influences his level of occupational aspiration. Later, we inquire about the effects on his aspirations for upward vertical mobility of three of his value orientations: his orientation to expediency, acceptance of authority, and equalitarianism.

Self-conception of Abilities

The hypothesis we tested was based on the following assumptions: first, the higher a principal's assessment of his skills as an educational administrator, the greater his belief in his qualifications to carry out the duties and responsibilities of higher administrators; second, the more qualified a principal believes he is to perform the tasks of higher administrators, the greater his desire for occupational advancement. If these assumptions are tenable, then the hypothesis follows that the higher a principal's evaluation of his skills as an educational administrator, the higher his level of occupational aspirations.

To test this hypothesis, we shall use the principals' self-evaluation of their abilities in three major aspects of the work of educational adminitrators: (1) their skill in handling human relations problems of educational organizations; (2) their ability to deal with routine managerial tasks; and (3) their ability to offer educational leadership to

their subordinates.

The measure of the principals' self-evaluation of their skill in human relations used to test the hypothesis was developed from their responses to a Self-evaluation Instrument based on 23 aspects of their work. A number of the items dealt with their social skills in coping with delicate interpersonal situations such as student discipline problems and complaints by parents. When the principals' responses to this instrument were factor analyzed, four factors were isolated, and one of them was designated as Self-assessment of Human Relations Skills. In measuring the five items contributing to this factor, we asked the principals: How would you rate ["outstanding," "excellent," "good," "fair," "poor," "very poor"] your performance in:

1. Handling delicate interpersonal situations.
2. Obtaining parental cooperation with the school.
3. Resolving student discipline problems.
4. Developing esprit de corps among teachers.
5. Handling parental complaints.

When the principals' scores on this factor[1] are cross-tabulated with their level of occupational aspiration scores, the findings support the hypothesis (Table 6-1). Thirty-five per cent of the principals with the highest scores on self-evaluation of their human relations skills are in the high LOA category as compared to 22 per cent with the lowest scores on this self-assessment criterion. The difference in the mean LOA score of those highest and lowest on self-evaluation of human relations skills (3.74 versus 3.09) is in the predicted direction and is

Table 6-1. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Scores on Self-Assessment of Human Relations Skills

(N = 379)*

Score on Self-assessment of Human Relations Skills	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	46%	32%	22%	3.09	2.39	93
Moderately Low	25	51	24	3.58	2.19	96
Moderately High	28	40	32	3.82	2.74	99
Highest	34	31	35	3.74	2.42	91

* Data unavailable for three cases.

$t_{(H-L)} = 1.83$; $p < .03$, one-tailed test.

significant statistically.

What about the principals' evaluation of their ability to deal effectively with their routine managerial tasks? Is it also positively related to their LOA?

The index of the principals' assessment of their routine managerial skills was also derived from the factor analysis of their replies to the Self-evaluation Instrument. A second factor,[2] Self-assessment on Skills in Dealing with Routine Managerial Tasks, was based upon the following five items:

1. Keeping the school office running smoothly.
2. General planning for the school.
3. Directing the work of administrative assistants.
4. Cutting "red-tape" when fast action is needed.
5. Publicizing the work of the school.

When we examine the relationship between the principals' scores on the factor of Self-assessment in Dealing with Routine Managerial Tasks and their LOA scores, the findings also offer support for the hypothesis (Table 6-2). Thirty-two per cent of the administrators with the highest scores on this dimension of self-evaluation have high LOA scores in comparison to 19 per cent of those with low self-evaluation scores. The difference of 0.65 in the mean LOA scores of the principals who placed highest in self-evaluation of ability to deal with routine managerial tasks (3.72) and those who are lowest (3.07) is significant statistically.

We now turn to the findings when we tested the hypothesis with the third criterion of self-evaluation we examined: self-assessment of their

Table 6-2. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Scores on Self-Assessment in Dealing with Routine Managerial Tasks

(N = 379)*

Score on Self-assessment in Dealing with Routine Managerial Tasks	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	36%	45%	19%	3.07	2.08	88
Moderately Low	30	40	30	3.71	2.32	95
Moderately High	33	37	30	3.70	2.58	96
Highest	34	34	32	3.72	2.72	100

* Data unavailable for three cases.

$t_{(H-L)} = 1.82$; $p < .03$, one-tailed test.

educational leadership. This index was also obtained from the factor analysis of their responses to the Self-evaluation Instrument. The third factor,[3] Self-assessment of Educational Leadership was based on the following eight items:

1. Getting experienced teachers to upgrade their performance.
2. Improving the performance of inexperienced teachers.
3. Getting teachers to use new educational methods.
4. Giving leadership to the instructional program.
5. Communicating the objectives of the school program to the faculty.
6. Getting teachers to coordinate their activities.
7. Knowing about the strengths and weaknesses of teachers.
8. Maximizing the different skills found in a faculty.

The findings in this instance do not support the hypothesis (Table 6-3). When we classified the principals into four categories on the basis of their self-evaluation of their ability to offer educational leadership to their subordinates, those with the lowest self-assessment obtained a higher mean LOA score than the principals in the highest self-evaluation category. Furthermore, the mean LOA scores of the principals who were in the two intermediate categories on self-evaluation of educational leadership were higher than those of the administrators in either of the extreme categories. However, an F-test of the LOA means of the four groups of principals revealed that they are not significantly different from each other, and thus indicates that the principal's self-evaluation on educational leadership has no relationship to his level of

Table 6-3. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Scores on Self-Assessment of Educational Leadership

(N = 379)*

Score on Self-assessment of Educational Leadership	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	32%	38%	30%	3.55	2.08	106
Moderately Low	37	35	29	3.68	2.80	98
Moderately High	27	44	29	3.60	2.34	92
Highest	37	39	24	3.39	2.61	83

* Data unavailable for three cases

$t_{(H-L)} = -0.47$; $p > .55$, one-tailed test.

$F = 0.22$; $p > .85$.

occupational aspiration.

We conclude, therefore, that a principal's self-assement of his human relations skills and his ability to deal with routine managerial tasks are positively related to his LOA but that his self-evaluation of his educational leadership is not.

What could account for the fact that two of the three self-assessment criteria were associated with the principal's LOA but that the third was not? The explanation that we find most plausible is that principals may conceive of higher administrator positions as jobs that demand excellent human relations skills and the ability to cope with routine administrative problems, but that they may not view them as positions that include the function of offering a high degree of professional leadership to their subordinates. If these conditions were in fact true; and if, as we assumed, the principals' perceptions of their own capabilities with respect to their definition of the role of administrative superiors is positively related to their LOA, then we would expect to find, as we did discover, that their self-assessment on the criterion of educational leadership would not be asscciated with their level of occupational aspirations, but that their self-evaluations on human relations and routine administrative skills would be positively related to their LOA.

Expediency as a Value Orientation

Individuals who serve as school principals are confronted with many issues that can be approached from a moralistic or expediency point of view. For example, if a principal knows that a group of students

deviate from school regulations, and he had reason to believe that if he applied negative sanctions to them their parents could create serious difficulties for him, he can ignore or give considerable weight to this circumstance in deciding upon his course of action. How he responds to the situation probably can be accounted for in part by his predilection to decide issues on moralistic criteria or those based on expediency. Is there any relationship between the primacy a principal places on "doing what is right" versus "doing what is most expedient" and his LOA?

We assumed that the more primacy a principal gives to moralistic considerations in his decisions, the less attracted he would be to positions in the field of educational administration that require a "political" orientation. If we further assume that principals are aware that higher administrative officials must at times adopt a "political" orientation in their efforts to resolve conflicting pressures and demands from diverse groups such as parents, businessmen, local politicians, school personnel, and the school board and that the higher an official's position in the administrative hierarchy of a school system, the greater the number of and the more severe the issues of this kind to which he is exposed, then it follows that: the greater the primacy a principal gives to considerations of expediency in his value orientations, the higher his LOA.

To test this hypothesis, we used as a measure of the expediency orientation of principals an index developed from their replies to an Expediency Orientation Instrument. When the responses to this instrument were subjected to a principal components factor analysis, 12 items

had the highest loadings on a factor which we designate, Orientation to Expediency. For each of these items, we asked the principals: "How strongly do you agree or disagree ["strongly agree," "agree," "slightly agree," "slightly disagree," "disagree," "strongly disagree"] with the following statements?"

1. A person must operate on the basis of definite standards of right and wrong which are not to be varied from situation to situation.
2. No values can be eternal; the only real values are those which meet the needs of the given moment.
3. A person must operate on the basis of standards of right and wrong, but these standards should be flexible enough to be varied from situation to situation.
4. Standards of right and wrong have little use in practice; it's the undesirable consequences which one must take into consideration.
5. Nothing is static, nothing is everlasting; at any moment one must be ready to meet the change in environment by a necessary change in one's moral views.
6. Firm policies of right and wrong have little use in practice, for each situation must be judged on its own merits.
7. The solution to almost any human problem should be based on the situation at the time, not on some general rule.
8. The solution to almost any human problem should be based on some moral rule, not on the situation at the time.

9. There are times when one simply cannot afford to do what ke knows is right.
10. A person should always do what he sincerely feels is right, regardless of what the unwelcome consequences might be.
11. To violate one's standards of right and wrong is like having no standard at all.
12. It would be better to lose one's job than to do something which one knows is not right.

When the principals' scores on this factor[4] are cross-tabulated with their LOA scores, the findings do not support the hypothesis (Table 6-4). Although the principals who are in the two highest groups on our index of expediency had somewhat higher mean LOA scores than those in the two lowest groups, the difference between the mean score of the most and least expedient principals (3.66 versus 3.45) is not significant statistically. We conclude that the principals' value orientation toward expediency is not associated with their level of occupational aspiration.

Acceptance of Authority

We now consider another value orientation that might possibly influence the principals' LOA: acceptance of authority.

It could be argued that principals who have a negative orientation to the acceptance of authority would not find higher administrators in their school systems attractive role models whereas those that had a positive orientation to acceptance of authority would want to emulate

Table 6-4. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Scores on Expediency as a Value Orientation

(N = 380)*

Score on Expediency Orientation	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	33%	40%	27%	3.45	2.27	95
Moderately Low	34	37	29	3.47	2.34	95
Moderately High	31	44	25	3.73	2.63	95
High	35	33	32	3.66	2.57	95

* Data unavailable for two cases.

$t_{(H-L)} = 0.60$; $p > .40$, one-tailed test.

them, and therefore the latter would have greater aspirations to achieve higher administrative positions than the former. One could also reason that a principal with a negative orientation toward the acceptance of authority would probably at times exhibit his feelings in his relationships with his superiors, who in turn could be expected to react unfavorably to him. Such a principal could be expected to encounter less encouragement from his superiors to strive for a higher administrative position than one who maintained more cordial relations with his bosses. On the basis of these lines of reasoning one would expect that the greater a principal's acceptance of authority, the higher his LOA.

However, we felt that more compelling arguments could be offered in support of a negative relationship between acceptance of authority and LOA. We reasoned that principals with a positive orientation to the acceptance of authority would tend to find their present positions much more rewarding than those with a negative orientation to the acceptance of authority for two reasons: first, the principalship requires its incumbents to exercise a considerable amount of control over both students and faculty; and second, principals generally are also the recipients of a great deal of deference from these groups; if we further assume that the more gratification principals derive from their present position the less predisposed they are to leave it, then it follows that the greater the principals' acceptance of authority the lower their LOA.

To test the hypothesis that there would be a negative relationship between acceptance of authority and LOA, we employed as a measure of the independent variable an index developed from the principals' responses

to the short form of The Value Profile, an instrument constructed by Bales and Couch.[5] When their responses were factor analyzed, seven factors emerged, and one of them, as anticipated, may be used as an index of acceptance of authority. The 10 items in this factor are:

1. Obedience and respect for authority are the most important virtues children should learn.
2. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.
3. Patriotism and loyalty are the first and most important requirements of a good citizen.
4. You have to respect authority, and when you stop respecting authority, your situation isn't worth much.
5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
6. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
7. The most important qualities of a real man are determination and driving ambition.
8. No sane, normal, decent person could ever think of hurting a close friend or relative.
9. Our modern industrial and scientific developments are signs of a greater degree of success than that attained by any previous society.
10. When we live in the proper way -- stay in harmony with the

forces of nature, and keep all that we have in good condition -- then all will go well in the world.

Table 6-5 reveals the the findings when we cross-tabulated the principals' scores on the factor, Acceptance of Authority,[6] with their LOA scores. It shows that the data support the hypothesis: the greater the principal's acceptance of authority, the lower his level of occupational aspiration. Twenty-two per cent of the principals who were classified as highest in acceptance of authority have high LOA scores as compared to 34 per cent who were in the lowest category on this value orientation. The difference of 0.75 between the mean LOA scores of principals lowest and highest in their orientation to acceptance of authority (3.88 versus 3.13) is significant statistically. We conclude, therefore, that acceptance of authority is negatively related to LOA.

Equalitarianism

We have found that principals who place less stress on the acceptance of authority tend to have a higher level of aspiration than those who place more emphasis on this value orientation. Now we inquire about the relationship between the principals' equalitarian orientation toward their associates and their LOA.

The hypothesis we tested was that the more equalitarian a principal is in his orientation to others, the greater his LOA. It was based on assumptions similar to the ones underlying the hypothesis linking acceptance of authority to level of occupational aspirations. We assumed that administrators with a negative orientation to equalitarianism in

Table 6-5. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Value Orientation on Acceptance of Authority

(N = 381)*

Score on Acceptance of Authority	Principal's LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	30%	36%	34%	3.88	2.54	94
Moderately Low	24	47	29	3.66	2.18	96
Moderately High	40	32	28	3.59	2.76	96
Highest	40	38	22	3.13	2.27	95

* Data unavailable for one case.

$t_{(L-H)} = 2.14$; $p < .02$, one-tailed test.

their social relationships would derive greater gratification from the principalship than those with a positive orientation to equalitarianism because of the control they are able to exercise over their faculty and students and the deference they receive from them; and we further assumed that the more gratification principals derive from their job, the less their desire to leave it.

To test this hypothesis, we used as an index of the principals' equalitarianism a second factor score derived from their responses to The Value Profile which included the following four items:

1. There should be equality for everyone -- because we are all human beings.
2. Everyone should have an equal chance and an equal say.
3. A group cannot get its job done without voluntary cooperation from everyone.
4. A group of equals will work a lot better than a group with a rigid hierarchy.

When the principals' scores on this factor[7] are cross-tabulated with their LOA scores, the findings reveal that the hypothesis is supported (Table 6-6): nearly twice the proportion of principals who have the highest scores on equalitarianism have high LOA scores than do those with the lowest scores on equalitarianism (35 per cent versus 18 per cent). Furthermore, the mean LOA scores rise monotonically from a low of 3.18 for those principals lowest on equalitarianism to a high of 3.82 for those highest on this value orientation. The difference of 0.64 units in the LOA scores of the principals in the extreme groups is

Table 6-6. Percentage Distribution, Mean, and Standard Deviation of the Principals' LOA Scores by Four Levels of Their Value Orientation on Equalitarianism.

(N = 382)

Score on Equalitarianism	Principals' LOA Score			Mean LOA Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Lowest	38%	44%	18%	3.18	2.12	96
Moderately Low	32	40	28	3.53	2.44	96
Moderately High	32	36	32	3.73	2.61	96
Highest	31	34	35	3.82	2.58	94

$t_{(L-H)} = 1.87$; $p < .04$, one-tailed test.

significant statistically. We conclude that equalitarianism and LOA are positively related.

Notes and References for Chapter Six

1. For the item means, standard deviations, and weights used in computing the score, Self-assessment of Human Relations Skills, see Appendix B, Table B-7.

2. For the item means, Standard deviations, and weights used in computing the score, Self-assessment on Skills in Dealing with Routine Managerial Tasks, see Appendix B, Table B-8.

3. For the item means, standard deviations, and weights used in computing the score, Self-assessment of Educational Leadership, see Appendix B, Table B-9.

4. For the item means, standard deviations, and weights used in computing the score, Orientation to Expediency, see Appendix B, Table B-10.

5. For a description of this instrument, see Robert F. Bales and Arthur S. Couch, The Value Profile: A Factor Analytic Study of Value Sentiments, 1959, an unpublished report.

6. For the item means, standard deviations, and weights used in computing the score, Acceptance of Authority, see Appendix B, Table B-11.

7. For the item means, standard deviations, and weights used in computing the score, Equalitarianism, see Appendix B, Table B-12.

Chapter 7: Level of Occupational Aspiration and Role and Organizational Performance

In previous chapters we treated the level of occupational aspiration of principals as a dependent variable and inquired about a number of circumstances and conditions that could be viewed as its possible determinants. In this chapter, we treat LOA as an independent variable and examine what effects, if any, the principals' aspirations to move up the administrative hierarchy have on their role performance and the operation of their schools. In considering the relationship between LOA and the conduct of principals, we shall focus on three aspects of their performance: their attempts to introduce innovations in their schools, their efforts to involve parents in school affairs, and the degree of control they exercise over the behavior of their staffs. In investigating the organizational effects of LOA, we shall deal with three aspects of the school's functioning: efforts of teachers to offer maximum service to students, student academic performance, and staff morale. We now present our findings about the association between the principals' level of aspiration and these aspects of role and organizational performance.

Role Performance of Principals

Attempts to Introduce Innovations

In the first hypothesis it is assumed that principals with a high level of occupational aspiration will have a greater interest in making themselves and their schools highly "visible" to the higher administrative officials of their school systems than those with little or no

desire for upward vertical mobility. We further assume that one of the major ways a principal can achieve visibility is to secure a reputation as an educational innovator. That is, by attempting to introduce educational innovations into his school, a principal can attract the attention of his superiors to his initiative, his educational ideas, and his concern for improving the educational program. On the basis of this line of reasoning, we hypothesized that: the higher a principal's LOA, the greater his attempt to introduce innovations into his school.

Our measure of the principal's effort to introduce innovations was based on the responses of the teacher-observers[1] in each school to the following six questions: "How frequently ["always," "almost always," "occasionally," "almost never," "never"] engage in the following activities?"

1. Encourage the staff to learn about and try out some of the "new ideas" coming from schools of education.
2. Encourage new teachers to consider adopting new educational ideas which have been tried out in other communities and found to be successful.
3. Encourage schools of education to conduct experimental research in the school.
4. Attempt to secure teachers in the school who are interested in experimenting with new educational ideas.
5. Seek out new ideas to introduce into the school's program.
6. Give additional free time to teachers who are trying out new ideas in their classes.

These items were selected on the basis of a factor analysis of a Principal's Role Behavior Instrument covering a number of dimensions of his behavior. The procedure used to obtain an index of how much effort the principal made to introduce innovations into his school was as follows: first, on the basis of the teachers' responses to the six questions, a score for each teacher was computed based on the weights derived from the loadings of items included in the factor.[2] The teacher-observer scores in each school were then averaged to obtain a best estimate of the degree to which principals attempt to introduce innovations into their schools.[3]

When we cross-tabulate the principals' LOA scores with their scores on this index of their effort to introduce innovations into their schools, the findings do not support the hypothesis (Table 7-1): although those principals with a relatively high level of aspiration have a higher mean score on our index of effort to introduce innovations than those obtained by the principals with moderate or low LOA, the difference between the mean scores of principals highest and lowest in their LOA is not significant statistically. We therefore interpret these findings as not supporting the hypothesis and as showing that level of aspiration is not associated with the principals' efforts to introduce innovations into their schools.

Parent Involvement in School Affairs

Is the LOA of principals associated with their efforts to involve parents in school affairs? It is this question we now propose to examine.

Table 7-1. Percentage Distribution, Mean, and Standard Deviation of Principals' Scores on Efforts to Introduce Educational Innovations by Three Levels of Their Scores on LOA

(N = 344)*

Principal's LOA Score	Principal's Score on Efforts to Introduce Educational Innovation: Low	Moderate	High	Mean Mean Score	Standard Deviation	Number of Cases
High	27%	40%	33%	5.60	2.12	95
Moderate	37	30	33	5.25	2.17	131
Low	34	31	35	5.31	2.18	118

* Data unavailable for 38 cases.

$t_{(H-L)} = 0.97$; $p > .16$, one-tailed test.

There was considerable variation among the principals in our sample in their interest in developing close links between parents and their schools. This is indicated by the replies of the teacher-observers to the following question: "How frequently ["always," "almost always," "occasionally," "almost never," "never"] does [your] principal use interested parents as an advisory group when making out the course of study?" Nearly one-third of the teachers said their principal did involve parents in this way occasionally or more frequently; one-fourth indicated that he almost never did; and slightly less than one-half replied that he never involved interested parents in this aspect of school affairs. Another example is afforded by the teachers' responses to the following question: "How frequently does [your] principal encourage parent groups to evaluate how well the school is achieving its curricular objectives?" Forty-two per cent of the teachers responded that their principal "occasionally" or more frequently did engage in this type of behavior; 28 per cent said he "almost never" did; and 30 per cent replied he never encouraged parents to assess the school's performance.

The hypothesis we tested was that the higher the principal's level of aspiration, the more he would attempt to involve parents in school activities. It was based on two lines of reasoning. The first assumed that principals who have a relatively high level of aspiration take a greater interest in the activities of their professional associations than those with relatively low LOA, and since one of the major norms of these groups is that principals should involve parents in school affairs, we assumed that the higher the principal's LOA, the more he would attempt

to conform to this professional norm. The second line of reasoning was based on the following assumptions: first, that the higher the principal's LOA, the greater his interest in securing the approbation of his administrative superiors; second, that principals are aware that the central office of city school systems is highly desirous of maintaining "effective" public relations with the community; and third, the greater his contributions to this activity, the more positively he would be evaluated by the higher administration. On the basis of both of these types of reasoning, we anticipated that LOA would be positively related to the principals' attempts to involve parents in school affairs.

To test this hypothesis, we used a second factor score[4] derived from the responses of the teacher-observers to another set of questions in the Principal's Role Behavior Instrument. The questions to which they responded were: "How frequently ["always," "almost always," "occasionally," "almost never," "never"] does your principal engage in the following activities?"

1. Encourage a group of parents to discuss and help formulate the educational philosophy to be used in the school.
2. Use interested parents as volunteer part-time "teacher helpers."
3. Encourage parents to help during school hours on school or class trips or projects.
4. Use interested parents as an advisory group when making out the course of study.
5. Encourage interested parent groups to evaluate how well

the school is achieving its curricular objectives.

6. Encourage parental attendance at school assemblies.

To obtain a summary measure of the principals' efforts to involve parents in school activities, we first computed a factor score for each teacher on the basis of his responses to the six questions using the weights derived from the loading of the items in the factor. We then averaged the scores of the teacher-observers in each school to obtain the best estimate of the principal's performance on the variable, his involvement of parents in school affairs.

The findings that emerged when we cross-tabulated the LOA scores of the principals with our index of their involvement of parents in school activities are presented in Table 7-2. They reveal that although principals who had the greatest LOA obtained the highest mean "parent involvement" score (7.05), the second highest mean score (6.85) was secured by those with the least LOA; and those administrators who were moderate in their level of occupational aspirations had the lowest mean score (6.64) on parent involvement. Furthermore, the difference between the mean "parent involvement" scores of the administrators who were highest and lowest in their LOA is not significant statistically. The findings, in short, do not offer support for the hypothesis. To determine whether there were significant differences among the three mean scores, we computed an F-ratio. The findings reveal that they are not significantly different from each other at below the .05 level; thus we conclude that the principal's LOA and the degree to which he involves parents in school affairs are not related.

Table 7-2. Percentage Distribution, Mean and Standard Deviation of Principals' Scores on Parent Involvement in School Affairs by Three Levels of Their Scores on LOA

(N = 344)*

Principal's LOA Score	Principals' Score on Parental Involvement in School Affairs: Low	Moderate	High	Mean Score	Standard Deviation	Number of Cases
High	26%	34%	40%	7.05	1.31	95
Moderate	37	33	30	6.64	1.45	131
Low	35	33	32	6.85	1.47	118

*Data unavailable for 38 cases.

$t_{(H-L)} = 1.03$; $p > .15$, one-tailed test.

$F = 1.15$; $p > .32$.

Control of Staff Performance

Principals vary considerably in the way they cope with another of their major organizational problems: the degree of control to be exercised over the performance of their subordinates.

Principals may grant their teachers a great deal of freedom in the operation of their classrooms or they may exert a high degree of constraint over their performance. That such variability in fact exists is evidenced by the responses of the teacher-observers to a series of questions about the amount of control their principals exercised over their performance. Of the 3,299 teachers who responded to the question, "How frequently does your principal require that teachers discuss their major classroom problems with him," 32 per cent reported that he "always" or "almost always" does whereas 36 per cent prelied "never" or "almost never." Over half (56 per cent) of the teachers reported that their administrator "always" or "almost always" requires that teachers' classroom behavior conform to his standards while one-fifth (21 per cent) indicated that he "never" or "almost never" does. And when we asked the teachers about the frequency with which their principal "checks to see that teachers prepare written lessen plans," 22 per cent replied that they "always" or "almost always" do while 56 per cent responded "never" or "almost never."

Is the principal's LOA associated with the degree of control he maintains over the performance of his teachers?

We felt that it could be argued with equal plausibility that LOA would be negatively or positively related to the principal's exercise of

control over his staff and therefore decided in this case to test the null hypothesis. As a measure of the degree of control the principals exercised over their subordinates, we used a third factor score[5] derived from the responses of the teacher-observers in their school to eight questions about their principal's behavior. The questions to which they responded were: "How frequently ["always," "almost always," "occasionally," "almost never," "never"] does your principal engage in the following activities?"

1. Require that teachers discuss their major classroom problems with the principal.
2. Ask teachers to report all major conferences with parents to the principal.
3. Require teachers to keep the principal informed about "problem" children in their classrooms.
4. Closely direct the work of teachers who are likely to experience difficulty.
5. Require that teachers' classroom behavior conform to the principal's standards.
6. Check to see that teachers prepare written lesson plans.
7. Know what is taking place in most classrooms during most of the day.
8. Determine what the objectives of the guidance program should be in the school.

We used the same basic procedures to develop an index of the principals' control over their subordinates as we employed in constructing

summary scores of the two other aspects of their performance we have considered earlier: first, we computed a factor score for each teacher-observer based on his responses to the eight questions about his principal, using the weights derived from the loading of the items in the factor; second, we then averaged the scores of the teacher-observers in each school to obtain the best estimate of principals' performance on the dimension, control exercised over the performance of subordinates.

When we cross-tabulated the principals' scores on LOA with their scores on the control of subordinates, we find that the data support the null hypothesis (Table 7-3): there are only small differences in the percentage of principals with high scores on control of subordinates when they are classified into three LOA categories, and the mean scores of the three groups of administrators on control of subordinates are not significantly different from each other. We conclude that the two variables are not related.

Organizational Performance

Until now, we have inquired about the effects of the principals' LOA on three important aspects of their role performance: their attempts to introduce educational innovations into their schools, their efforts to involve parents in school affairs, and their control over their subordinates. We have found that a principal's level of aspiration is not significantly associated with any of these three dimensions of his conduct.

We now turn our attention to the final question of the study:

Table 7-3. Percentage Distribution, Mean, and Standard Deviation of Principals' Scores on Control over Staff Performance by Three Levels of Their Scores on LOA

(N = 344)*

Principal's LOA Score	Principal's Score on Control over Teachers Performance: Low	Moderate	High	Mean Score	Standard Deviation	Number of Cases
High	34%	30%	36%	6.66	2.25	95
Moderate	36	33	31	6.33	2.19	131
Low	30	36	34	6.65	2.23	118

* Data unavailable for 38 cases.

F = 0.358; p > .70.

"What impact, if any, does the principal's LOA have on the functioning of his school?" In examining it, we shall consider three possible organizational effects on schools for which data were available[6] of his level of occupational aspiration: the performance of his staff, student academic achievement, and faculty morale.

Performance of Teachers

Schools are characterized by great variation in the extent to which their teachers attempt to offer maximum service to students. In some schools most teachers are highly efficient in their use of classroom time for learning purposes whereas in others a majority of the faculty are not. Schools vary in the extent to which teachers expose their students to a variety of instructional techniques or curricular materials or simply limit their activities to textbook teaching. They also vary in the amount of teachers' commitment to their responsibilities and in respect to their concern and interest in upgrading the educational program of the school.

Is teacher behavior of these kinds, conduct indicative of a high or low degree of effort to be of maximum service to students, associated with the principal's LOA?

To explore this question, we required a measure of the variation among schools in the effort of teachers to be of maximum service to students. Such an index was developed from the replies of the teacher-observers in each school to the following eight questions: "Of the teachers in your school, what per cent:"

1. Are committed to doing the best job of which they are capable.
2. Maintain a professional attitude towards their work.
3. Maintain an interest in improving the educational program of the school.
4. Maintain effective discipline in their classes.
5. Try new teaching methods in their classrooms.
6. Waste a lot of time in their classroom activities.
7. Do "textbook teaching" only.
8. Usually "drag their feet" when new ideas are introduced into the school program.

An examination of the correlation matrix of the averaged reports of the teacher-observers in each school to these eight questions revealed that they were highly interrelated and that they appeared to tap a single dimension. We then subjected the averaged reports to each item for each school to a principal components factor analysis, and using the resulting factor weights, a Teacher Effort Score was calculated for each school.[7] It is this summary measure that we employ in examining the relationship between the LOA of principals and teacher effort.

Table 7-4 reveals the findings when we cross-tabulated the administrators' LOA scores with their scores on our indes of teacher effort. They show that the mean teachers' effort score was highest in schools administered by principals with the lowest level of aspiration, and that it was lowest in schools whose principals had "moderate" LOA; the mean teachers' effort score in schools whose principals have the highest LOA

Table 7-4. Percentage Distribution, Mean, and Standard Deviation of School Teacher Effort Scores by Three Levels of the Principals' Scores on LOA

(N = 335)*

Principal's LOA Score	School Teacher Effort Score			Mean Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	33%	36%	31%	9.77	3.28	89
Moderate	31	38	31	9.58	3.82	125
Low	36	27	37	10.11	4.15	121

* Data unavailable for 47 schools.

$F = 0.18$; $p > .83$.

fell between those of the other two groups of administrators. However, the F-test in Table 7-4 indicates that the three mean scores on teachers' effort are not significantly different from each other, and we therefore conclude that the LOA of a principal is not related to his teachers' effort to be of maximum service to their students.

Student Academic Performance

If, as we have seen, the LOA of principals has no relationship to the teachers' performance, and if teachers are the adults in the school who have the greatest opportunity to influence the learning of students, then we might anticipate that LOA will also not be related to student performance.

To examine this question, we needed an index of the amount of student learning that occurred in each school in our sample. To obtain one, we asked teachers five questions about the academic performance of their students. The questions to which they responded were: "Of the students you teach, what per cent:"

1. Are not mastering the subject matter or skills you teach at the minimum level of satisfactory performance.
2. Are one or more years behind grade level in reading ability.
3. Were not adequately prepared to do the grade level work expected of them when they entered your class (or classes).
4. Are not interested in academic achievement.
5. Work up to their intellectual capacities.

As anticipated, the averaged scores for the five questions in each school were highly interrelated suggesting that a summary index of

student academic performance could be developed from them. We therefore performed a principal components factor analysis on the correlation matrix, and the resulting factor weights were applied to each item for each school. Finally, a summary measure of student academic performance in each school was obtained.[8]

When we cross-tabulated the principals' LOA scores with the students' academic performance scores for the 291 schools in which data were available (Table 7-5),[9] a similar pattern of findings occurred as emerged when we examined the relationship between LOA and teacher performance: student performance was highest on the average in schools whose principals had the highest LOA and lowest in schools with principals with a moderate level of aspiration; and the mean student academic performance in schools whose principals have the highest LOA was intermediate between those of the other two groups of administrators. However, when we applied an F-test to the three mean scores on student academic performance to ascertain if there were statistically significant differences among them, we found that there were not. Therefore, we conclude that the LOA of principals is not significantly associated with the academic performance of their students.[10]

Faculty Morale

The final question to be examined is: What relationship, if any, exists between the principal's LOA and faculty morale. We view morale as ". . .the capacity of a group of people to pull together persistently and consistently in pursuit of a common purpose."[11] In the case of teachers, we assumed that morale is evidenced by characteristics such as

Table 7-5. Percentage Distribution, Mean, and Standard Deviation of School Scores on Student Academic Performance by Three Levels of the Principals' Scores on LOA

(N = 291)*

Principal's LOA Score	School Student Academic Performance Score			Mean Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	28%	30%	42%	9.98	3.00	79
Moderate	39	32	29	9.31	3.50	110
Low	31	38	31	9.51	3.33	102

* Data unavailable for 91 schools.

F = 0.95; p > .38.

pride in and loyalty to the school, cooperative relationships among teachers, and acceptance of its educational philosophy.

Again, we shall test the null hypothesis: that there is no relationship between LOA anf faculty morale.

To examine it, we used as a measure of faculty morale an index based on the teachers' replies to the following six questions: "Of the teachers in your school, what per cent:"

1. Display a sense of pride in the school.
2. Enjoy working in the school.
3. Display a sense of loyalty to the school.
4. Respect the judgment of the administrators of the school.
5. Accept the educational philosophy underlying the curriculum of the school.
6. Work cooperatively with their fellow teachers.

We computed the mean of the responses of the teacher-observers in each school to each of the six questions to obtain an averaged report of their responses and then intercorrelated them. The correlation matrix indicated a high degree of association among the averaged scores, indicating that they were reflecting a single dimension. A principal components factor analysis was then performed on the 6 x 6 correlation matris and the resulting factor weights were applied to the averaged reports to obtain a summary measure of faculty morale for each school.[12]

The findings that resulted when we cross-tabulated the principals' LOA scores with the scores on faculty morale in their schools are presented in Table 7-6. They reveal that the data support the null hypothesis:

Table 7-6. Percentage Distribution, Mean, and Standard Deviation of School Staff Morale Scores by Three Levels of the Principals' Scores on LOA

(N = 335)*

Principal's LOA Score	School Staff Morale Score			Mean Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	36%	36%	28%	9.77	3.28	89
Moderate	35	35	30	9.58	3.82	125
Low	31	31	38	9.90	4.15	121

* Data unavailable for 47 schools.

F = 0.61; p > .75.

there were no significant differences in the mean faculty morale scores of schools whose principals have high, moderate, or low scores on our index of LOA. It is of interest to note, however, that for our sample of principals the lowest mean faculty morale scores occurred in those schools whose administrators were "moderate" in their LOA.

In summary, the findings presented in this chapter revealed that the LOA of principals has no apparent influence on three dimensions of their role performance: their attempt to introduce educational innovations into their schools, their involvement of parents in school affairs, and the control they exercise over the performance of teachers. In addition, the data showed that the level of occupational aspirations of principals has no effect on teachers' efforts to be of maximum service to their clients, student performance, and teachers' morale. Our data, in short, offer no support for those who assume that LOA constitutes an important determinant of the role performance of principals or the "efficiency" and "effectiveness" of their organizations.

Notes and References for Chapter Seven

1. The superintendents of schools in 40 of the 41 cities who participated in the National Principalship Study agreed to have their teachers participate in it. A random sample of 10 teachers in each of the 476 participating schools in these 40 cities were mailed a 21-page Teacher Questionnaire that included a Principal's Role Performance Instrument. It dealt with the frequency with which their principal engaged in various kinds of behavior, for example, efforts to introduce innovations, attempts to involve parents in school activities, and control over teachers' performance. Out of the 4,760 Teacher Questionnaires sent out, 3,367 (71 per cent) were returned in usable form. These 3,367 teachers from 476 schools constitute the teacher-observers of the National Principalship Study.

2. See Appendix B, Table B-13 for the item means, standard deviations, and weights used in computing a teacher-observers' score on a principal's attempt to introduce innovations into his school. The weights for the loadings of items included in this factor, as well as those used in the factors, Parent Involvement in School Affairs and Control of Staff Performance, were derived from a factor analysis of the principals' responses to the Principal's Role Behavior Instrument. Since a major focus of the National Principalship Study was upon principals, all factor analyses were performed on the correlation matrices computed from their responses to the many items. When factor scores were also required for the teachers (or higher administrators), the item means, standard deviations, and factor weights resulting from the factor

analyses of the principals' matrix were applied to the teachers' and higher administrators' data in computing their factor scores. In the case of the Principal's Role Behavior Instrument, the principals and teachers were asked to indicate their expectations for a principal's role performance and report on the frequency of his behavior. Since a basic concern of the study was with the comparison of the expectations and behavior of school principals in developing summary scores for their behavior, the item means, standard deviations, and factor weights resulting from the principals' expectations were applied to all responses (their own and those of their teachers) elicited to describe their behavior. In this way, the operational definitions of all scores developed from a given set of items were made identical.

3. We were unable to calculate teacher-observer scores for all of the 382 schools administered by the men principals for two reasons: first, as noted in footnote 1, one superintendent of schools did not grant permission to obtain data from teachers in his school system and it included 35 schools whose principals were participants in the National Principalship Study; second, in a small number of schools, fewer than four teachers responded to the Teacher Questionnaire. No teacher-observer average scores were computed for any school unless there was a minimum of four teacher-observers. For a further discussion of this matter, including a consideration of the reliability of teacher responses, see Neal Gross and Robert E. Herriott, Staff Leadership in Public Schools: A Sociological Inquiry (New York: John Wiley & Sons, 1965), Chapter 2 and Appendices B and D.

4. See Appendix B, Table B-14, for the item means, standard deviations, and weights used in computing a teacher-observers' score on principal's attempt to involve parents in school affairs. Also see footnotes 1, 2, and 3 above for technical details related to the development of this score.

5. See Appendix B, Table B-15, for the item means, standard deviations, and weights used in computing a teacher-observers' score on principal's control of staff performance. Also see footnotes 1, 2, and 3 above for technical details related to the development of this score.

6. In the analysis of the relationship between LOA and the dependent variables, teacher performance and staff morale (Tables 7-4 and 7-6), data were unavailable for 47 of the 382 schools for the two reasons specified in footnote 3 above. For the analysis of the association between LOA and student academic performance (Table 7-5), data were unavailable for 91 of the 382 schools. In this case there were two reasons in addition to those specified in footnote 3 for the lack of indices of student academic achievement. First, in order to insure that the teacher-observers were reporting on pupils who had been in their schools long enough to have come under the influence of their principal, we excluded as observers all teachers of first grade pupils. Second, in order to use as observers only those with sufficient experience to make valid reports, we also eliminated all who were in their first year of teaching. In consequence, the total number of schools for which we had a minimum of four teacher-observers was 291, and the relationship between the LOA of the principal and our index of student academic achievement could be

examined for only 291 of the 382 men principals.

7. See Appendix B, Table B-16, for the item means, standard deviations, and weights used in computing the school score on Teacher Effort.

8. See Appendix B, Table B-17, for the item means, standard deviations, and weights used in computing the school score on Student Academic Performance.

9. See footnote 6 of this chapter for the explanation of why it was necessary to restrict the analysis to 291 of the 382 school principals.

10. The possibility was explored that the variable, social class composition of the student body, could be masking a relationship between the principal's LOA and student academic performance since the data of the National Principalship Study revealed a strong positive association between the social class composition of the student body and student academic achievement. For this condition to exist, it would also have been necessary for principals with high LOA to have been more frequently located in schools whose student bodies were characterized by low social class backgrounds. However, there was no association between the principal's LOA and the social class composition of the school he administered.

11. Alexander H. Leighton, "Applied Science in Human Relations," Personnel Administration, 9 (1947), p. 5.

12. See Appendix B, Table B-18, for the item means, standard deviations, and weights used in computing the school score on Faculty Morale.

Chapter 8: Summary and Major Conclusions

This inquiry was concerned with the level of occupational aspirations (LOA) of men school principals which was defined as their desire to attain higher level administrative positions in school systems. It was designed to accomplish two major objectives: first, to isolate social and psychological conditions that may serve as determinants of LOA; and second, to examine its effects on the role performance of these educational administrators and on the functioning of their schools. An additional purpose of the inquiry was to determine the nature and intensity of the career aspirations of men principals in three areas: their desire to upgrade their occupational status as principals; their desire to achieve recognition in their professional associations; and their desire to move up to positions higher up in the administrative hierarchy of school systems.

The findings of the study were based on data primarily obtained from the 382 men principals who participated in the National Principalship Study, a research program that dealt with a number of research questions of interest to both social scientists and educational practitioners. The Study involved a national cross-section of 501 principals in 41 cities in all regions of the United States as well as their administrative superiors and their teachers. Data were obtained from the principals through personal interviews and from their responses to a large number of research instruments. The index used to measure the LOA of principals was based on a factor score derived from their responses to a 16-item Career Aspirations Instrument.

Determinants of LOA

The investigation revealed the following set of findings about six social identities of men principals as possible correlates of their level of occupational aspiration:

1. Age was negatively related to the principal's LOA.
2. The race of principals was not significantly associated with their LOA.
3. Jewish principals had the highest LOA, Catholic principals the next highest, and Protestant principals were characterized by the lowest LOA.
4. The social origins of principals as indexed by the education, income, or occupation of their fathers were not associated with their LOA.
5. The level of formal education attained by principals as indexed by the highest academic degree they had achieved was positively related to their LOA: principals with a doctorate had the highest level of occupational aspiration and those who had achieved only a bachelor's degree had the lowest LOA. However, neither the total semester hours of graduate education the administrators had taken or the total number of courses in educational administration they had completed were significantly associated with their LOA.
6. There were no significant differences in the level of aspiration of elementary, junior high, and senior high school principals.

With respect to indicators of the occupational orientations of principals and differences in their job histories, the findings revealed:

1. Principals for whom teaching had been their first vocational choice had a lower level of LOA than those who had initially desired to enter other occupations or professions.
2. The greater the principal's degree of dissatisfaction with his socio-economic status when he was a teacher, the higher his LOA.
3. The greater the stress a principal placed on financial considerations in his career decisions, the higher his LOA.
4. The earlier the age at which a principal achieved his first principalship, the higher his LOA.
5. The longer a principal has served in the principalship, the lower his LOA.

The empirical findings provided support for the following hypotheses about "job satisfaction" correlates of LOA:

1. The greater a principal's satisfaction with the income rewards of the principalship, the lower his LOA. (There was no relationship between their salaries as principals or their total income and LOA.)
2. The greater a principal's satisfaction with the social status of the principalship, the lower his LOA.
3. The greater a principal's satisfaction with the opportunity his position provided for the utilization of his special talents, the lower his LOA.

4. The more satisfied a principal is with the progress he has made in his career, the lower his LOA.
5. The more satisfied a principal is with the higher administration of his school system, the lower his LOA.

The data did not provide support for the hypothesis that a principal's intrinsic job satisfaction is negatively related to his LOA. There were no statistically significant differences in the level of occupational aspiration of principals who were classified as relatively high, moderate, and relatively low in their LOA.

The findings about the relationship between a principal's self-assessment of his abilities and his LOA were as follows:

1. The higher a principal's evaluation of his skills in human relations, the higher his LOA.
2. The higher a principal's evaluation of his skills in dealing with routine managerial tasks, the higher his LOA.
3. There were no significant differences in the average LOA scores of principals who varied in their self-assessment of the educational leadership they offered to their teachers.

In regard to a principal's value orientations, the findings revealed that:

1. There was no relationship between a principal's orientation to expediency and his LOA.
2. The more positive a principal's orientation to acceptance of authority, the lower his LOA.
3. The more positive a principal's orientation to equalitarianism in his social relationships, the higher his LOA.

The Effects of LOA

We examined the relationships between a principal's LOA and the three following aspects of his performance: his attempts to introduce educational innovations in his schools, his efforts to involve parents in school affairs, and the degree of control he exercised over his staff. The findings revealed that LOA was not significantly associated with any of these dimensions of role performance.

The relationships between the three following aspects of the school's functioning and the principal's LOA were analyzed in an attempt to determine its organizational effects: the teachers' performance with respect to their efforts to offer maximum service to students; student academic performance, and staff morale. The findings revealed that these three organizational variables were not associated with the principal's level of occupational aspiration.

The Career Aspirations of Principals

Some of the major findings that emerged from the analysis of the principals' responses to the Career Aspirations Instrument were:

1. Over two and a half times the proportion of men principals indicated some desire to secure a higher administrative post in their own school system than in some other one (54 per cent versus 21 per cent).
2. Sixteen per cent of the men expressed some desire to become a superintendent of a large city school system, and 12 per cent

indicated some desire to serve as the chief administrator of a small school system.

3. Over three out of 10 of the men principals expressed some degree of interest in higher administrative positions such as assistant or deputy superintendent of schools.
4. A much larger percentage of male school principals desired to improve their status in the principalship by obtaining a higher salary in their current position than by moving to another principalship.
5. Only 13 per cent of the men principals displayed some degree of interest in obtaining a principalship in a wealthy suburban community.
6. Only 14 per cent of the men school principals indicated a strong desire to assume a more important role in their professional organizations.

Appendix A: Research Instruments

The multiple objectives of the National Principalship Study required the collection of a large body of data from the three types of school personnel who participated in it: principals, teachers, and higher administrators. The research instruments used in the Study numbered 192 pages. The instruments used to obtain data on the job history and personal and social background of the principals and their self-evaluations were presented in Appendix A of Final Report No. 1 of Cooperative Research Project No. 853. We present in Appendix A-1 the instrument used to obtain the measure of the principal's level of occupational aspiration (LOA); we also present three other instruments used in the LOA inquiry: Enjoyment of Work Activities (A-2), Satisfaction with Conditions of Work and Career (A-3), and Satisfaction with Socio-economic Status When a Teacher (A-4).

A-1: The Career Aspirations Instrument

Instructions	Question 27
At the heading of the column to the right is a question. Please answer this question for each of the things found below. In answering the question, circle the one code letter which best represents your answer.	How desirous are you of doing the following things? A = I would not want to. . . B = I am not especially anxious to. . . C = I have some desire to. . . D = I would very much like to. . . E = I am extremely anxious to. . .
1. Obtain a principalship that has greater responsibilities than my present position.	A B C D E
2. Obtain a principalship that would carry more prestige than my present position.	A B C D E
3. Take every opportunity to advance my own career.	A B C D E
4. Obtain a principalship which would pay more money than my present position.	A B C D E
5. Obtain a higher administrative position in my current school system.	A B C D E
6. Obtain a higher administrative position in some other school system.	A B C D E
7. Become an assistant or deputy superintendent of schools in a large city system.	A B C D E
8. Become the school superintendent of a large city system.	A B C D E
9. Become the school superintendent of a small school system.	A B C D E
10. Become a college professor of education.	A B C D E
11. Take a more important role in professional educational organizations.	A B C D E
12. Establish an outstanding reputation among my professional colleagues.	A B C D E
13. Some day be president of a state association of principals.	A B C D E

Please continue answering Question 27.	Question 27 How desirous are you of doing the following things? A = I would not want to. . . B = I am not especially anxious to. . . C = I have some desire to. . . D = I would very much like to. . . E = I am extremely anxious to. . .
14. Some day be president of a national association of principals.	A B C D E
15. Obtain a principalship in a wealthy suburban community.	A B C D E
16. Obtain a higher salary in my present position.	A B C D E

A-2: Enjoyment of Work Activities Instrument

PSP

Instructions

The role of the PRINCIPAL is a varied one, involving many different tasks and calling for the application of many different skills. Most principals find that they enjoy these different aspects of their role to varying degrees.

Please answer the question to the right for each of the aspects of the principal's role given below. In answering this question, circle the one code letter which best represents your answer.

Question 25

To what degree do you enjoy each of the following aspects of a principal's role?

I enjoy. . .

A = A great deal
B = Very much
C = Somewhat
D = Very little
E = Not at all
N = Aspect not relevant in my particular situation

Aspects of a Principal's Role						
1. Handling administrative routine.	A	B	C	D	E	N
2. Supervising the instructional program.	A	B	C	D	E	N
3. Allocating the school budget.	A	B	C	D	E	N
4. Talking with individual parents about a problem concerning their child.	A	B	C	D	E	N
5. Serving on committees with parents.	A	B	C	D	E	N
6. Talking with a group of parents about a school problem.	A	B	C	D	E	N
7. Working primarily with teachers, rather than with pupils.	A	B	C	D	E	N
8. Working with "exceptionally able" teachers.	A	B	C	D	E	N
9. Working with "average" teachers.	A	B	C	D	E	N
10. Working with new teachers.	A	B	C	D	E	N
11. Working with youngsters who are having a hard time adjusting to a school situation.	A	B	C	D	E	N
12. Having a vacation from work periodically during the school year.	A	B	C	D	E	N
13. Conducting teachers' meetings.	A	B	C	D	E	N
14. Evaluating teacher performance.	A	B	C	D	E	N
15. Having the freedom to schedule one's own time.	A	B	C	D	E	N
16. Working with community agencies.	A	B	C	D	E	N

Please continue answering Question 25.	Question 25 To what degree do you enjoy each of the following aspects of a principal's role? I enjoy. . . A = A great deal B = Very much C = Somewhat D = Very little E = Not at all N = Aspect not relevant in my particular situation
17. Handling public relations.	A B C D E N
18. Supervising custodial personnel.	A B C D E N
19. Supervising office personnel.	A B C D E N
20. Supervising large groups of students.	A B C D E N
21. Having to reprimand teachers.	A B C D E N
22. Having to discipline pupils.	A B C D E N
23. Preparing staff bulletins or announcements.	A B C D E N
24. Working with guidance personnel.	A B C D E N
25. Working with curriculum specialists.	A B C D E N
26. Preparing reports to the higher administration.	A B C D E N

A-3: Satisfaction with Conditions of Work and Career Instrument

Instructions	Question 26
Please answer the question to the right for each of the items found below. In answering this question, circle the one code letter which best represents your answer.	How do you feel about the following items? I feel. . . with. . . A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied

Items	
1. The current state of the principalship as a "profession."	A B C D E F
2. The top salary nowadays available for principals.	A B C D E F
3. My chances for receiving salary increases as a principal.	A B C D E F
4. The amount of progress which I have made in my professional career.	A B C D E F
5. The amount of recognition which principals are given by society for their efforts and contributions.	A B C D E F
6. The capabilities of most of the people who are currently in the principalship.	A B C D E F
7. The capabilities of most of the people who are currently entering the principalship.	A B C D E F
8. The effect of a principal's job upon his family life.	A B C D E F
9. The effect of a principal's job upon his social life.	A B C D E F
10. The possibilities for a principal advancing to a position of greater responsibility.	A B C D E F
11. The amount of recognition which principals are given by members of other professions.	A B C D E F
12. The opportunity which the principalship provides for making the best use of my particular talents.	A B C D E F

Please continue answering Question 26.	Question 26. How do you feel about the following items? I feel. . . with. . . A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied
13. The level of professional standards maintained by most principals.	A B C D E F
14. The opportunity which principals have for associating with other professional people.	A B C D E F
15. The amount of recognition which non-educators give to principals as compared to what they give to other professionals.	A B C D E F
16. The amount of time for leisure activities which the principalship affords.	A B C D E F
17. My decision to become an educator rather than something else which I may have originally considered.	A B C D E F
18. The current requirements which must be met before one can originally be certified as a principal.	A B C D E F
19. The current requirements which must be met before one can continue to be certified as a principal.	A B C D E F
20. The amount of clerical help which is available to me in my present position.	A B C D E F
21. The "fringe benefits" which principals in this school system now receive.	A B C D E F
22. The amount of space provided for my official use in this school.	A B C D E F
23. The level of competence of most of the other principals in this school system.	A B C D E F
24. The present method employed in this school system for making decisions on curriculum matters.	A B C D E F

Please continue answering Question 26 .	Question 26. How do you feel about the following items? I feel. . . with. . . A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied
25. The present method employed in this school system for making decisions on teacher discipline matters.	A B C D E F
26. The attitude of the teachers in this school toward the administrative personnel.	A B C D E F
27. The manner in which the principals and the higher administration work together in this school system.	A B C D E F
28. The cooperation and help which I receive from my superiors.	A B C D E F
29. The educational philosophy which seems to prevail in this school system.	A B C D E F
30. The evaluation process which my superiors use to judge my effectiveness as a principal.	A B C D E F
31. The cooperation which I receive from the parents of the children in this school.	A B C D E F
32. The level of competence of my superiors.	A B C D E F
33. The adequacy of the supplies available for me to use as principal of this school.	A B C D E F
34. The amount of custodial help which is available to me in this school.	A B C D E F
35. The amount of time made available by my superiors for my personal professional growth.	A B C D E F
36. The extent to which I am informed by my superiors about school matters affecting my school.	A B C D E F

Please continue answering Question 26.	Question 26 How do you feel about the following items? I feel. . . with. . . A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied
37. The teaching effectiveness of the faculty of this school.	A B C D E F
38. The extent to which the professional growth of principals is subsidized by this school system.	A B C D E F

A-4: Satisfaction with Socio-economic Status When a Teacher Instrument

Instructions

Please think back to your last year as a full-time teacher and answer the question to the right for each of the items found below. In answering this question circle the one code letter which best represents your answer.

Question 24

How did you feel about the following items?

I felt. . . with. . .

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

Items						
1. The state of teaching as a "profession."	A	B	C	D	E	F
2. The top salary then available for teachers.	A	B	C	D	E	F
3. My chances for receiving salary increases as a teacher.	A	B	C	D	E	F
4. The amount of progress which I was making in my professional career.	A	B	C	D	E	F
5. The amount of recognition which teachers were given by society for their efforts and contributions.	A	B	C	D	E	F
6. The capabilities of most of the people who were then entering teaching.	A	B	C	D	E	F
7. The capabilities of most of the people who were in teaching.	A	B	C	D	E	F
8. The effect of a teacher's job upon his family life.	A	B	C	D	E	F
9. The effect of a teacher's job upon his social life.	A	B	C	D	E	F
10. The possibilities for a teacher advancing to a position of greater responsibility in teaching.	A	B	C	D	E	F
11. The amount of recognition which teachers were given by members of other professions.	A	B	C	D	E	F
12. The opportunity which teaching provided for making the best use of my particular talents.	A	B	C	D	E	F
13. The level of professional standards maintained by most teachers.	A	B	C	D	E	F

Please continue answering Question 24.

Question 24

How did you feel about the following items?

I felt. . . with. . .

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

Items						
14. The opportunity which teachers had for associating with other professional people.	A	B	C	D	E	F
15. The amount of recognition which non-educators gave to teachers as compared to what they gave to other professionals.	A	B	C	D	E	F
16. The amount of time for leisure activities which teaching afforded.	A	B	C	D	E	F
17. My decision to become an educator rather than something else which I may have originally considered.	A	B	C	D	E	F
18. The requirements which had to be met before one could originally be certified as a teacher.	A	B	C	D	E	F
19. The requirements which had to be met before one could continue to be certified as a teacher.	A	B	C	D	E	F

Appendix B: Factor Weights and Guttman-type Scales Used in Measurement of Variables

This appendix presents information about the measurement techniques used in the development of summary scores employed in the LOA investigation. With the exception of four variables, the summary scores were computed with factor analytic procedures. Table B-1 presents the results of the varimax rotation of the weights of the first three factor of the Principal Components Factor Analysis of the principals' responses to the 16 items in the Career Aspirations Instrument. The summary score of LOA was developed from the principals' responses to items with "significant" loadings on Factor I in this table, in accord with Harman's "shortened" method of factor scoring.[1] Tables B-6 through B-18 present the wording of the items, the means, standard deviations, and factor weights used to compute factor scores for many of the variables examined in the study. The correlation matrices which were factor analyzed and the details of the factor analysis, the varimax rotations, and the computation of factor score coefficients for these tables are not presented here in order to keep this appendix within reasonable limits and in view of the highly technical nature of these research activities.

Tables B-2 through B-5 deal with the computation of four summary scores that were based on Guttman-type scales. The development of each scale was carried out through the five following steps. In Step 1, the items from the instrument thought to be most relevant to each concept were identified and they were ranked on an a priori basis in order of their assumed relevance to the concept.

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[1] Harry H. Harman, Modern Factor Analysis (Chicago: University of Chicago Press, 1960), Chapter 16.

In Step 2, a 50 per cent random sub-sample of principals was drawn, and the item analysis procedure proposed by Stouffer et al.,[2] was applied to that sub-sample in order to assess the potential scalability of each item. One or two low priority items originally thought to measure each concept generally had to be eliminated at this point because of their inability to meet the Stouffer criteria. The selected items, their optimum definitions of a positive response, and the associated positive marginals are presented in the "scaling sub-sample" column of Tables B-2, B-3, B-4, and B-5.

In Step 3, still using only the 50 per cent scaling sub-sample, the items meeting the Stouffer criteria were scaled and the subjects scored by means of a computerized version of Stone's modification[3] of Ford's[4] rapid scaling procedure. The observed and expected (i.e., "chance") coefficients of reproducibility resulting from this process are also presented in these tables.

Step 4 was designed to protect against capitalization on random fluctuations possible with application of the Stouffer item analysis procedure prior to scaling. Using the same items and definitions of a

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[2]Samual A. Stouffer, et al., "A Technique for Improving Cumulative Scales," Public Opinion Quarterly, 16 (1952), pp. 273-291.

[3]Carol L. Stone, "A Machine Method for Scaling as Many as Twelve Dichotomies," Washington Agricultural Experiment Station Circular 329 (Pullman: Institute of Agricultural Sciences, State College of Washington, 1958), pp. 1-15.

[4]Robert N. Ford, "A Rapid Scoring Procedure for Attitude Questions," Public Opinion Quarterly, 14 (1950), pp. 507-532.

positive response developed through the item analysis of the scaling sub-sample, the data from the remaining 50 per cent of the data cases were also scaled and scored. These results are presented in the column entitled "replication sub-sample" in the four tables. For the four scales the results from the replication sub-sample are highly consistent with those obtained from the scaling sub-sample. Step 5 provided a check against random fluctuations in the response patterns as an explaration of the scaling results. We computed Chilton's[5] test of significance of the difference between observed and expected coefficients of reproducibility for the replication sub-sample. The resulting z-statistic was found to be statistically significant for all scales.

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[5] Roland J. Chilton, "Computer Generated Data and the Statistical Significance of Scalogram," Sociometry, 29 (June, 1966), pp. 175-181.

Table B-1. Varimax Loadings Resulting from Rotation of the First Three Factors in the Principal Components Factor Analysis of All 16 Items in the Career Aspirations Instrument

Item[a]	Factor Weights[b] I	II	III
1. Obtain a principalship that has greater responsibilities than my present position.	.19	.81*	.13
2. Obtain a principalship that would carry more prestige than my present position.	.24	.81*	.15
3. Take every opportunity to advance my own career.	.24	.30*	.25
4. Obtain a principalship which would pay more money than my present position.	.28	.65*	.19
5. Obtain a higher administrative position in my current school system.	.50	.48	.21
6. Obtain a higher administrative position in some other school system.	.66*	.30	.17
7. Become an assistant or deputy superintendent of schools in a large city system.	.74*	.29	.20
8. Become the school superintendent of a large city system.	.76*	.23	.19
9. Become the school superintendent of a small school system.	.75*	.11	.13
10. Become a college professor of education.	.45	.15	.18

[a]See Appendix A-1 for the response categories to the items in the Career Aspirations Instrument.

[b]Weights marked with an asterisk meet the two following criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .50; and (2) the absolute value of its loading was at least .20 greater than its loading on the other two factors.

Table B-1 (continued)

Item[a]	Factor Weights[b] I	II	III
11. Take a more important role in professional educational organizations.	.15	.30	.48
12. Establish an outstanding reputation among my professional colleagues.	.10	.30	.43
13. Some day be president of a state association of principals.	.17	.15	.78*
14. Some day be president of a national association of principals.	.30	.06	.71*
15. Obtain a principalship in a wealthy suburban community.	.43	.23	.36
16. Obtain a higher salary in my present position.	.11	.40	.11

[a]See Appendix A-1 for the response categories to the items in the Career Aspirations Instrument.

[b]Weights marked with an asterisk meet the two following criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .50; and (2) the absolute value of its loading was at least .20 greater than its loading on the other two factors.

Table B-2. Technical Details of Scale Construction: Satisfaction with Socio-economic Status as a Teacher

Number of Usable Cases = 501 Number of Items = 6

A. Operational Definition of Scale

Item[a]	Definition of Positive Response[a]	Per Cent Positive Marginal: Scaling Sub-sample	Replication Sub-sample	Total Sample
11	A, B, C, D	.765	.762	.760
10	A, B	.637	.647	.656
5	A, B, C	.542	.541	.540
3	A, B	.426	.421	.416
2	A, B	.331	.337	.344
15	A, B	.212	.226	.236

B. Coefficients of Reproducibility

	Scaling Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.932	.924	.923
Expected Coefficient of Reproducibility (CR_e)	.841	.844	.842
Number of Cases	251	250	501
Test of $CR_o - CR_e$ (z)	-	8.56*	-

[a]For wording of items and response alternatives, see Appendix A, A-4.

*Statistically significant at below .001 level.

Table B-2 (continued)

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ + + + + +	6	64	12.8
+ + + + + -	5	83	16.5
+ + + + - -	4	38	7.6
+ + + - - -	3	101	20.2
+ + - - - -	2	79	15.8
+ - - - - -	1	59	11.8
- - - - - -	0	77	15.4

Table B-3. Technical Details of Scale Construction: Satisfaction with Income Rewards of the Principalship

Number of Usable Cases = 498 Number of Items = 2

A. Operational Definition of Scale

Item[a]	Definition of Positive Response[a]	Per Cent Positive Marginal: Scaling Sub-sample	Replication Sub-sample	Total Sample
3	A, B, C	.672	.641	.657
2	A, B	.453	.418	.438

B. Coefficients of Reproducibility

	Scaling Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.986	.988	.987
Expected Coefficient of Reproducibility (CR_e)	.926	.925	.925
Number of Cases	247	251	498
Test of $CR_o - CR_e$ (z)	-	4.17*	-

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ +	2	217	43.6
+ -	1	123	24.7
- -	0	158	31.7

[a]For wording of items and response alternatives, see Appendix A, A-3.

*Statistically significant at below .001 level.

Table B-4. Technical Detials of Scale Construction: Satisfaction with the Social Status of the Principalship

Number of Usable Cases = 499 Number of Items = 3

A. Operational Definition of Scale

Item[a]	Definition of Positive Response[a]	Per Cent Positive Marginal		
		Scaling Sub-sample	Replication Sub-sample	Total Sample
11	A, B, C	.750	.757	.754
15	A, B	.452	.490	.471
5	A	.169	.171	.170

B. Coefficients of Reproducibility

	Scaling Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.993	.987	.990
Expected Coefficient of Reproducibility (CR_e)	.931	.931	.931
Number of Cases	248	251	499
Test of $CR_o - CR_e$ (z)	-	6.06*	-

[a]For wording of items and response alternatives, see Appendix A, A-3.

*Statistically significant at below .001 level.

Table B-4 (continued)

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ + +	3	83	16.6
+ + -	2	159	31.9
+ - -	1	140	28.1
- - -	0	117	23.4

Table B-5. Technical Details of Scale Construction: Satisfaction with the Higher Administration

Number of Usable Cases = 473 Number of Items = 8

A. Operational Definition of Scale

Item[a]	Definition of Positive Response[a]	Per Cent Positive Marginal: Scaling Sub-sample	Replication Sub-sample	Total Sample
27	A, B	.829	.841	.835
36	A, B	.761	.821	.791
25	A, B	.688	.669	.679
32	A	.590	.569	.579
28	A	.547	.556	.552
30	A	.406	.377	.392
38	A, B	.312	.293	.302
35	A	.222	.180	.201

B. Coefficients of Reproducibility

	Scaling Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.923	.936	.931
Expected Coefficient of Reproducibility (CR_e)	.831	.842	.837
Number of Cases	234	239	473
Test of $CR_o - CR_e$ (z)	-	11.19*	-

[a]For wording of items and response alternatives, see Appendix A, A-3.

*Statistically significant at below .001 level.

Table B-5 (continued)

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ + + + + + + +	8	61	12.9
+ + + + + + + -	7	36	7.6
+ + + + + + - -	6	83	17.5
+ + + + + - - -	5	60	12.7
+ + + + - - - -	4	26	5.5
+ + + - - - - -	3	77	16.3
+ + - - - - - -	2	61	12.9
+ - - - - - - -	1	17	3.6
- - - - - - - -	0	52	11.0

Table B-6. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Men Principals Used to Compute Summary Scores of Their Intrinsic Job Satisfaction

Item*	Mean	Standard Deviation	Factor Weight
To what degree [a great deal (5), very much (4), somewhat (3), very little (2), not at all (1)] do you enjoy:			
1. Talking with a group of parents about a school problem.	4.11	0.78	0.59
2. Talking with individual parents about a problem concerning their child.	4.14	0.71	0.57
3. Working with curriculum specialists.	4.02	0.86	.053
4. Conducting teachers' meetings.	3.71	.079	0.52
5. Handling public relations.	3.90	0.73	0.50
6. Evaluating teacher performance.	3.17	0.97	0.49
7. Serving on committees with parents.	3.76	0.95	0.48
8. Working with youngsters who are having a hard time adjusting to a school situation.	4.06	0.68	0.48
9. Supervising large groups of students.	3.72	0.95	0.48
10. Working with community agencies.	3.74	0.90	0.47
11. Working with new teachers.	4.39	0.69	0.46
12. Supervising the instructional program.	4.25	0.69	0.44

*Items ordered according to decreasing magnitude of factor weight.

Table B-6 (continued)

Item*	Mean	Standard Deviation	Factor Weight
13. Working with "average" teachers.	3.96	0.70	0.43
14. Working with "exceptionally able" teachers.	4.44	0.68	0.41
15. Working with guidance personnel.	4.26	0.84	0.41
16. Supervising office personnel.	4.47	0.91	0.39
17. Preparing staff bulletins or announcements.	3.14	0.87	0.34
18. Having the freedom to schedule one's own time.	4.26	0.75	0.34
19. Working primarily with teachers, rather than with pupils.	3.39	0.93	0.31
20. Supervising custodial personnel.	3.26	1.25	0.30

*Items ordered according to decreasing magnitude of factor weight.

Table B-7. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment of Human Relations Skills

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Resolving student discipline problems.	2.33	0.72	-0.61
2. Handling parental complaints.	2.33	0.72	-0.60
3. Handling delicate interpersonal situations.	2.54	0.80	-0.53
4. Obtaining parental cooperation with the school.	2.29	0.80	-0.53
5. Developing "esprit de corps" among teachers.	2.26	0.80	-0.50

*Items ordered according to decreasing magnitude of factor weight.

Table B-8. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment in Dealing with Routine Managerial Tasks

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Keeping the school office running smoothly.	4.52	0.78	0.67
2. General planning for the school.	4.63	0.74	0.61
3. Directing the work of administrative assistants.	4.46	0.79	0.47
4. Cutting "red-tape" when fast action is needed.	4.77	0.85	0.40
5. Publicizing the work of the school.	4.03	0.93	0.38

*Items ordered according to decreasing magnitude of factor weight.

Table B-9. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment of Educational Leadership

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Getting experienced teachers to upgrade their performance.	3.90	0.83	0.65
2. Improving the performance of inexperienced teachers.	4.21	0.79	0.62
3. Getting teachers to use new educational methods.	4.04	0.74	0.61
4. Giving leadership to the instructional program.	4.26	0.80	0.59
5. Communicating the objectives of the school program to the faculty.	4.44	0.77	0.57
6. Getting teachers to coordinate their activities.	4.22	0.71	0.56
7. Knowing about the strengths and weaknesses of teachers.	4.64	0.77	0.55
8. Maximizing the different skills found in a faculty.	4.41	0.81	0.54

*Items ordered according to decreasing magnitude of factor weight.

Table B-10. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Their Value Orientation on Expediency

Item*	Mean	Standard Deviation	Factor Weight
How strongly do you agree or disagree [strongly agree (1), agree (2), slightly agree (3), slightly disagree (4), disagree (5), strongly disagree (6)] with the statement that:			
1. A person must operate on the basis of definite standards of right and wrong which are not to be varied from situation to situation.	3.58	1.43	0.65
2. No values can be eternal; the only real values are those which meet the needs of the given moment.	4.87	1.03	-0.57
3. A person must operate on the basis of standards of right and wrong, but these standards should be flexible enough to be varied from situation to situation.	2.59	1.45	-0.53
4. Standards of right and wrong have little use in practice; it's the undesirable consequences which one must take into consideration.	5.09	0.79	-0.49
5. Nothing is static, nothing is everlasting; at any moment one must be ready to meet the change in environment by a necessary change in one's moral views.	4.29	1.35	-0.49
6. Firm policies of right and wrong have little use in practice, for each situation must be judged on its own merits.	3.55	1.49	-0.48

*Items ordered according to decreasing magnitude of factor weight.

Table B-10 (continued)

Item*	Mean	Standard Deviation	Factor Weight
7. The solution to almost any human problem should be based on the situation at the time, not on some general rule.	3.48	1.39	-0.48
8. The solution to almost any human problem should be based on some general moral rule, not on the situation at the time.	3.20	1.38	0.45
9. There are times when one simply cannot afford to do what he knows is right.	4.15	1.36	-0.44
10. A person should always do what he sincerely feels is right, regardless of what the unwelcome consequences might be.	2.26	1.14	0.38
11. To violate one's standards of right and wrong is like having no standard at all.	3.14	1.48	0.35
12. It would be better to lose one's job than to do something which one knows is not right.	2.89	1.31	0.34

*Items ordered according to decreasing magnitude of factor weight.

Table B-11. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Their Value Orientation on Acceptance of Authority

Item*	Mean	Standard Deviation	Factor Weight
How strongly [strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (5), agree (6), strongly agree (7)] do you agree or disagree with the statement that:			
1. Obedience and respect for authority are the most important virtues children should learn.	4.37	1.88	0.67
2. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.	3.74	1.73	0.60
3. Patriotism and loyalty are the first and most important requirements of a good citizen.	4.56	1.70	0.57
4. You have to respect authority, and when you stop respecting authority, your situation isn't worth much.	5.04	1.53	0.54
5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.	4.23	1.88	0.54
6. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.	4.24	1.72	0.54

*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-11 (continued)

Item*	Mean	Standard Deviation	Factor Weight
7. The most important qualities of a real man are determination and driving ambition.	2.85	1.55	0.49
8. No sane, normal, decent person could ever think of hurting a close friend or relative.	3.69	1.81	0.46
9. Our modern industrial and scientific developments are signs of a greater degree of success than that attained by any previous society.	4.28	1.79	0.43
10. When we live in the proper way -- stay in harmony with the forces of nature, and keep all that we have in good condition -- then all will go well in the world.	3.61	1.73	0.40

*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-12. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Their Value Orientation on Equalitarianism

Item*	Mean	Standard Deviation	Factor Weight
How strongly [strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (5), agree (6) strongly agree (7)] do you agree or disagree with the statement that:			
1. There should be equality for everyone -- because we are all human beings.	4.75	1.80	0.53
2. Everyone should have an equal chance and an equal say.	4.90	1.81	0.43
3. A group cannot get its job done without voluntary cooperation from everyone.	4.21	1.83	0.39
4. A group of equals will work a lot better than a group with a rigid hierarchy.	4.98	1.68	0.26

*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-13. Item Means, Standard Deviations, and Factor Weights Used in Computing Teacher-observers' Scores in 344 Schools for Constructing a Summary Measure of the Principals' Scores on Support of Innovation

Item*	Mean	Standard Deviation	Factor Weight**
Do you feel the principal of your school should [absolutely must (5), preferably should (4), may or may not (3), preferably should not (2), absolutely must not (1)] engage in the following activities?			
1. Encourage the staff to learn about and try out some of the "new ideas" coming from schools of education.	3.97	0.67	0.69
2. Encourage teachers to consider adopting new educational ideas which have been tried out in other communities and found to be successful.	4.10	0.66	0.67
3. Encourage schools of education to conduct experimental research in the school.	3.65	0.79	0.56
4. Attempt to secure teachers in the school who are interested in experimenting with new educational ideas.	3.90	0.77	0.56
5. Seek out new ideas to introduce into the school's program.	4.24	0.71	0.55
6. Give additional free time to teachers who are trying out new ideas in their classes.	3.79	0.82	0.47

*Items ordered according to decreasing magnitude of factor weight.

**See Chapter 7, footnote 2, for a description of the procedures used in computing the means, standard deviations, and factor weights presented in this table.

Table B-14. Item Means, Standard Deviations, and Factor Weights Used in Computing Teacher-observers' Scores in 344 Schools for Constructing a Summary Measure of the Principals' Scores on Parent Involvement in School Activities

Item*	Mean	Standard Deviation	Factor Weight**
Do you feel the principal of your school should [absolutely must (5), preferably should (4), may or may not (3), preferably should not (2), absolutely must not (1)] engage in the following activities?			
1. Encourage a group of parents to discuss and help formulate the educational philosophy to be used in the school.	3.35	1.01	0.61
2. Use interested parents as volunteer part-time "teacher helpers."	2.59	1.01	0.60
3. Encourage parents to help during school hours on school or class trips or projects.	3.67	0.88	0.60
4. Use interested parents as an advisory group when making out the course of study.	3.35	0.95	0.55
5. Encourage interested parent groups to evaluate how well the school is achieving its curricular objectives.	3.46	0.97	0.48
6. Encourage parental attendance at school assemblies.	3.63	0.78	0.44

*Items ordered according to decreasing magnitude of factor weight.

**See Chapter 7, footnote 2, for a description of the procedures used in computing the means, standard deviations, and factor weights presented in this table.

Table B-15. Item Means, Standard Deviations, and Factor Weights Used in Computing Teacher-observers' Scores in 344 Schools for Constructing a Summary Measure of the Principals' Scores on Control over Staff Performance

Item*	Mean	Standard Deviation	Factor Weight**
Do you feel the principal of your school should [absolutely must (5), preferably should (4), may or may not (3), preferably should not (2), absolutely must not (1)] engage in the following activities?			
1. Require that teachers discuss their major classroom problems with the principal.	3.76	0.85	0.63
2. Ask teachers to report all major conferences with parents to the principal.	3.55	0.90	0.59
3. Require teachers to keep the principal informed of "problem" children in their classrooms.	3.69	0.89	0.59
4. Closely direct the work of teachers who are likely to experience difficulty.	4.24	0.72	0.50
5. Require that teachers' classroom behavior conform to the principal's standards.	3.54	0.90	0.50
6. Check to see that teachers prepare written lesson plans.	3.58	0.93	0.46
7. Know what is taking place in most classrooms during most of the day.	3.72	0.82	0.39
8. Determine what the objectives of the guidance program should be in the school.	4.13	0.89	0.38

*Items ordered according to decreasing magnitude of factor weight.

**See Chapter 7, footnote 2, for a description of the procedures used in computing the means, standard deviations, and factor weights presented in this table.

Table B-16. Item Means, Standard Deviations, and Factor Weights Applied to the Averaged Reports* of Teachers within Each of 335 Schools for Computing the Teachers' Effort Score

Item**	Mean of Averaged Reports	Standard Deviation of Averaged Reports	Factor Weight
Of the teachers in your school, what per cent. . . .			
1. Are committed to doing the best job of which they are capable.	87.63	11.86	0.81
2. Maintain a professional attitude toward their work.	81.32	9.73	0.80
3. Maintain an interest in improving the educational program of the school.	73.03	14.71	0.80
4. Maintain effective discipline in their classes.	80.51	9.56	0.69
5. Usually "drag their feet" when new ideas are introduced into the school program.	22.92	11.41	-0.69
6. Try new teaching methods in their classrooms.	59.63	16.45	0.66
7. Do "textbook" teaching only.	24.76	13.67	-0.66
8. Waste a lot of time in their classroom activities.	18.92	11.12	-0.60

*For each item, the Averaged Reports consist of the mean of teacher responses to that item calculated within each school.

**Items ordered according to decreasing magnitude of factor weight.

Table B-17. Item Means, Standard Deviations, and Factor Weights Applied to the Averaged Reports* of Teachers within Each of 291 Schools for Computing the Students' Academic Performance Score

Item**	Mean of Averaged Reports	Standard Deviation of Averaged Reports	Factor Weight
Of the teachers in your school, what per cent. . . .			
1. Are not mastering the subject matter skills you teach at the minimum level of satisfactory performance.	20.72	19.92	0.81
2. Are one or more years behind grade level in reading ability.	31.74	26.43	0.80
3. Were not adequately prepared to do the grade level work you expected of them when they entered your class (classes).	32.06	25.92	0.80
4. Are not interested in academic achievement.	29.11	24.63	0.78
5. Work up to their intellectual capacities.	43.64	28.47	-0.48

*For each item, the Averaged Reports consist of the mean of teacher responses to that item calculated within each school.

**Items ordered according to decreasing magnitude of factor weight.

Table B-18. Item Means, Standard Deviations, and Factor Weights Applied to the Averaged Reports* of Teachers within Each of 335 Schools for Computing the Staff Morale Score

Item**	Mean of Averaged Reports	Standard Deviation of Averaged Reports	Factor Weight
Of the teachers in your school, what per cent. . . .			
1. Display a sense of pride in the school.	80.03	14.02	0.86
2. Enjoy working in the school.	79.52	13.64	0.82
3. Display a sense of loyalty to the school.	82.54	11.81	0.82
4. Respect the judgment of the administrators of the school.	76.17	14.83	0.78
5. Accept the educational philosophy underlying the curriculum of the school.	82.14	11.26	0.75
6. Work cooperatively with their fellow teachers.	84.77	8.54	0.69

*For each item, the Averaged Reports consist of the mean of teacher responses to that item calculated within each school.

**Items ordered according to decreasing magnitude of factor weight.