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ABSTRACT

OCCUPATIONAL AND ORGANIZATIONAL DETERMINANTS
OF BEHAVIOR AT WORK

By

Catherine Begnoche Smith

This dissertation examines the role that organizational and occupational variables play in determining the importance individuals attribute to their work involvement and their corresponding level of behavioral dedication to work.

After reviewing the literature concerning work motivations, work settings and organizational structures, several propositions were presented for empirical assessment. These propositions centered around the thesis that perceived potential for reward at work directly affects individuals' levels of self-investment in work, which in turn determines extent of dedication to work. Furthermore, the greater the perceived potential for reward at work, the greater the probability that workers will quit only to enter more rewarding jobs. Those lacking self-investment in work were expected to quit for random, non-career reasons. Tying these ideas into research on organizational and occupational factors, the general propositions were modified to suggest

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The study used a sample of teachers and principals in 53 elementary and secondary schools in Michigan so that four occupational categories in a range of organizational settings could be compared and contrasted. Survey data and organizational records were used as sources of data for proposition-testing.

In adapting the general propositions to the case of public education employees, it appeared that principals and secondary personnel faced a more advantageous reward structure than did teachers in general or elementary personnel of any type. According to the propositions, then, principals should exhibit greater self-investment in work than teachers and, within those categories, secondary personnel should have higher self-investment in work than elementary personnel, with related differences in level of dedication to work. Intra-occupationally, the propositions suggested that schools with higher scores on hierarchy, specialization, use of universalistic criteria of evaluation and lower scores on centralization of authority should encourage greater self-investment and dedication in their employees.

The propositions relating perceived potential for reward at work to both self-investment in work and dedication received considerable support from the data comparing the four occupational groups. However, intra-occupational analysis discriminating very finely among organizational

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patterns produced weaker and less consistent support for the propositions. Whether the intra-occupational differences were simply too small to show much effect can only be answered by further research. Since it proved impossible to infer bases for job-leaving, the apparent differences in mobility patterns could not adequately test the relevant propositions. The propositions received indirect support from the fact that several competing explanations of work behavior were tested simultaneously and found lacking. Neither sex of worker, age of worker nor level of job satisfaction explained patterns of variation in self-investment or dedication to work as well as the structural explanation, although age was related to participation in union activity.

This research makes a contribution to the subject of work motivation by showing that bureaucratic organization does not necessarily discourage involvement in work, even for professional workers. This study tested a new perspective on the bases of variations in work behavior, rather than relying on the problematic and unconvincing theories offered by researchers concerned with the impact of job satisfaction or variations in human relations techniques. Instead, this dissertation offers a more complete explication of the process of involvement in work and presents evidence that the structure of opportunity at work, as shaped by occupational and organizational factors, may have major consequences for worker perceptions and behavior.

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OCCUPATIONAL AND ORGANIZATIONAL DETERMINANTS OF BEHAVIOR AT WORK

By

Catherine Begnoche Smith

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology

1976

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There are several individuals whose encouragement and assistance helped to bring this project to completion.

Dr. Philip Marcus, dissertation chairman, helped me to modify the original research plan to take advantage of an existing pool of data. I greatly appreciate the use of this material, as well as his counsel and encouragement during the collection of additional data and during the tribulations of extended analysis.

Dr. William Faunce was of great assistance in the formulation of the research propositions, while Dr. Harry Perlstadt and Dr. John Gullahorn evaluated early drafts of the proposal and research reports. The suggestions and criticisms of these three committee members were invaluable.

For assistance in technical areas, I thank Tom Nichol, who wrote the necessary computer programs, Gary Shepherd, who gave me access to the Michigan School Census data and Mark Rideout, who helped in the coding of union contracts. Also, since I lacked outside funds for analysis, the computer time provided by the Sociology Department was of major assistance.

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Finally, my husband, Bruce Smith, helped immeasurably at each step of the dissertation. I appreciate his cheerful assistance in such tasks as keypunching cards, running programs, checking calculations and bibliographic references and, in general, encouraging me to finish.

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CHAPTER I

INTRODUCTION TO THE RESEARCH PROBLEM

Work has been an inescapable and central activity throughout the history of mankind. Only during the last century, however, has there been much interest in or attempted systematic explanation of the social aspects of work. In recent decades, we have witnessed an increasing effort on the part of social scientists concerned with classifications of types of work and explanations of individual differences in work behavior. For instance, the recent concern over the problems of professional workers in bureaucratic settings provides clear evidence that the sociology of work, which attempts to integrate occupational, organizational and individual variables, has so far failed to provide consistent and logical explanations of worker behavior.

In looking at the progression of dominant research ideas and assumptions in the area of work, we see two major assumptions underlying most modern attempts to explain worker behavior. The first assumption is that certain structural conditions and managerial principles maximize

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job satisfaction, need satisfaction or morale of workers. According to the second assumption, differences in satisfaction levels explain variations in such things as worker performance, absenteeism, quitting and interest in work. One further assumption has been that females and female occupations are characterized by lower performance and dedication levels and that structural differences have little impact on female behavior. The major research concern, stemming directly from these assumptions, focused upon those structural and managerial conditions that are most satisfying for male workers. There has been little attempt to validate any of the assumptions and thus very little interest in comparison of males and females in the same occupations and even less interest in the possibility of establishing any non-attitudinal explanation of work behavior.

This dissertation lies within the general tradition of the sociology of work in its emphasis upon structural variables affecting workers. However, this study diverges from the traditional perspective in two major ways: by directly focusing upon behavioral dependent variables, irrespective of satisfaction levels and by considering variations in structural conditions in more than one occupational category and for both males and females.

The questions whose answers will be attempted in this dissertation are: "Are members of one occupation similar in behavior even in very different organizational environments?" and, even more importantly, "Do structural

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The theoretical basis for this study lies in three broad areas of sociological research. From social psychology, the dissertation depends upon exchange theories regarding the importance of possible and actual rewards as a basis for continued involvement of individuals in an activity area. The symbolic interactionist concepts of self-esteem and reference groups are also important elements of this dissertation.

From occupational research, this study uses descriptions of occupational differences in rewards, mobility and arbiters of work roles and some recent attempts to relate these variables. The third area of theoretical concern, formal organizations, is the source of several ideas that suggest a framework for occupational differences in opportunities and for intra-occupational differences based upon characteristics of focal organizations. Theories of bureaucracy, involving variables such as hierarchy, centralization and specialization suggest variations in the types of constraints upon workers and point to the importance of systematic variation of both occupation and organizational setting.

While using these elements of conventional sociological research, this dissertation proposes very different types of relationships among the variables than those found in typical research in the sociology of work. The most

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important area of difference centers around the effects of bureaucratic organization upon employees. Most contemporary research emphasizes the existence of negative effects of bureaucracy and attempts to explicate the reasons for such negative effects (see Blauner, 1964; Scott, 1965; or Kornhauser, 1965).

This dissertation, however, proposes that several elements in the bureaucratic model may have positive effects upon worker behavior and self-esteem, even for professional workers, by permitting greater potential rewards for investment of energy in work-role performance and by permitting workers to concentrate energy in areas appropriate to their training. I suggest that nonbureaucratic situations are less likely to offer these advantages to workers. I do not expect, however, that the relationship between bureaucratic structure and worker dedication will be linear and positive; rather, it seems likely that some elements of bureaucratization will, up to some maximum point, encourage dedication on the part of workers. In the interest of simplicity, propositions will be stated in linear terms.

Fifty-three public elementary and secondary schools in five large Michigan school districts comprise the sample of organizations studied. Bureaucratization at both the district and the school level will be analyzed. From the many occupations whose members are employed in these organizations four focal occupations were chosen for study: elementary and secondary teachers and principals. Data

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from organizational records, employee surveys and state of Michigan records are used to study the questions raised in this dissertation.

This study offers both theoretical and practical contributions to the existing literature on work and on education. First, I expect to clarify the impact that various organizational conditions make upon the professional behavior and the perceptions of teachers and principals. A byproduct of this particular focus will be a test of the validity of the occupational distinctions made between the elementary and secondary levels in education. Furthermore, I hope to identify the relative importance of district and of school structural variables and of student compositional variables upon teacher and principal responses. Finally, this dissertation will attempt to identify the actual importance of individual variables such as age and sex as factors underlying worker behavior and adherence to occupational norms.

Outline of the Chapters

The research shall be presented as follows: Chapter II contains the literature relevant to the research question, the derivation of the propositions and the concrete research hypotheses.

Chapter III contains a description of the logic of the research design, the sites and sample characteristics. The rationale for measuring the variables, the statistics

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used and the analysis procedure are also discussed. Chapters IV through VII present data and analysis, while Chapter VIII concludes the dissertation with a summary and ideas for future research.

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CHAPTER II

REVIEW OF THE LITERATURE AND DEVELOPMENT OF PROPOSITIONS

Introduction

The organizational structure of public education has been undergoing radical change in recent years with the implications of new laws and new organizational tasks finally being felt at the local level. Population shifts and district consolidation have interacted with increasing specialization of school personnel and with recently successful attempts at collective bargaining to create very different organizational patterns and problems than previously seen in the United States.

One effect of these recent changes is the creation of a more heterogeneous population of school structures and of school personnel, even within school districts of similar size and locale. These facts present a prime opportunity for the study of occupational members across organizational settings. Most research concerning the effects of structure upon workers has considered either occupational variation

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The Job Satisfaction--Morale Hypotheses

During the last few decades, social scientists have devoted much time and effort to the study of workers and their jobs in an attempt to discover the determinants of effective performance. There has been no abatement of interest on the topic in recent years, largely because the net accumulation of hundreds of studies (1500 by 1957--Herzberg, et al., 1957) has failed to produce any consistent, logical explanation for phenomena such as job satisfaction, performance levels and efforts, turnover rates or intensity of interest in work.

Any review of the literature on the subject of job satisfaction (for example, see Herzberg, 1957 or Vroom, 1964) shows that the most common working assumption in such studies has been the idea that workers' job satisfaction or morale directly leads to similar levels of productivity and dedication to work.

For instance, in one specific test of the idea that satisfaction promotes greater productivity, Katz, Maccoby and Morse studied employees of an insurance company.

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Comparing highly productive and less productive sections, they found no difference in type or level of mean satisfaction of workers (1950). Katz, et al., then replicated the study using employees of a railroad company and establishing results very similar to those of the first study (1951). Likert, however, in attempting to rescue job satisfaction as an important variable underlying worker behavior, dismissed results like those of Katz et al. with the suggestion that the level of skill required to perform the job is an important intervening variable, such that satisfaction and performance will be more strongly related in highly skilled jobs (1961). Vroom's review of the empirical evidence for this proposition, however, showed that the differences observed across skill levels usually are very small, although in the direction predicted by Likert (1964).

Further evidence that seriously damaged the credibility of the satisfaction-morale explanation of worker behavior was evaluated in a recent Department of Labor monograph. This review of research results showed that job satisfaction appears to affect turnover, absenteeism and sabotage but not productivity level (1974). Both Parnes (1971) and Mangione (1972) have offered considerable evidence regarding the negative relationship between satisfaction levels and turnover rates. The relationship of satisfaction and absenteeism is somewhat less clear (see Katz and Kahn, 1965 and Ingham, 1970). It appears, however, that the naive assumption that satisfied workers will be

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Even a cursory review of research findings regarding work behavior raises very basic questions about the social-psychological and structural bases of worker behavior. What makes workers happy? An even more critical question may be: Why have social scientists assumed that happiness affects behavior at work?

A great number of contradictory ideas and fragments of data can be cited in attempting to explain the widespread acceptance of these assumptions.

In answering the first question, concerning the factors underlying job satisfaction, one of the most firmly established research findings is that job level, in a hierarchical sense, has a great effect upon stated satisfaction with work (see Gurin et al., 1960, as an example). Attempting to explain that fact, some researchers have suggested that differences in work roles and situses (such as differences in complexity, status, pay, type of work, promotion possibilities, autonomy, etc.) are basically hierarchical in distribution and that these are critical determinants of job satisfaction. Supporting this argument, Katz cited the dissatisfying effect of repetitiveness of work (1954), which is more often a characteristic of jobs low in a hierarchy. Walker and Guest studied the effects upon workers of mechanical pacing of work and control of only a few basic operations and found that both variables produced

dissatisfaction and both occurred mainly at low hierarchical levels (1962). Attempts to make low-level jobs more like higher level positions, by changing some aspects of job structure, have appeared to make employees somewhat happier (see Guest, 1957, and Lawler, 1969).

Evidence from other sources suggests that use of workers' abilities, opportunity for self-expression and overall mental health appear to be hierarchically related and to affect satisfaction levels. Promotional opportunities and history also affect satisfaction but are less clearly linked to position in the hierarchy (Brophy, 1959; Vroom, 1962; Kornhauser, 1965; Morse, 1953; and Spector, 1956).

Whether one explains satisfaction levels in terms of the fulfillment of psychological needs, the opportunity for status-improvement or purely extrinsic factors like pay and conditions, each of these appears related to the hierarchical level of the job. But while this statement shows some progress has been made in identifying factors responsible for satisfaction levels, much less progress has been made in establishing the importance of satisfaction as a predictor of behavioral phenomena. Vroom, for instance, summarized an extensive body of literature describing bases of job satisfaction but found that this literature had identified no general effects attributable to satisfaction (1964). In particular, the assumption that job satisfaction would promote worker performance efforts has failed to receive general empirical support. One might question the

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One might just as reasonably propose that satisfaction is only a hairbreadth from satiation, which probably would not stimulate efforts to improve performance. This perspective, that satisfaction is an ineffective basis for stimulating productivity, is a basic concern of several researchers, notably Argyris, Vroom and Faunce. They suggest that workers require stimulation and the potential for meeting personal needs through work, in order to be motivated to expend much energy at work. From this perspective, income, status, peer approval and sensitive supervisors (all considered important by mainstream management theorists), not provide adequate incentive for worker dedication. Some rewards may even be a source of further alienation by diverting attention away from the characteristics of the job itself, producing what Seeman has called "self-estrangement"--a lack of involvement or interest in work itself. Israel suggested that such alienation produces in workers a concentration on time--how much time it takes to do a job, how quickly time flies, and so forth (1971). Thus a worker may be satisfied with the physical conditions and rewards of the job without developing any interest or involvement in the substance of the work. Only if the work stimulates interest would one expect performance levels to be affected,

since improved performance may require more time, more concentration and less clock-watching.

Carrying the criticism of the conventional approach further, even the apparent strengths and contributions of job-satisfaction research may be illusionary. For instance, it appears that job satisfaction is related to turnover rates since several studies have cited correlations between the two. However, uncritical acceptance of this relationship requires one to assert that the specific case of job satisfaction and propensity to quit is unlike the more general relationship of personal satisfaction and likelihood of disengaging from any social relationship. The general rule was suggested by Thibaut and Kelley, who pointed out that individuals do continue their involvement in low satisfaction situations if the degree of satisfaction in the current situation is larger than anticipated levels in perceived alternative situations (1959). Thus, some qualification of the observed correlation between job satisfaction and turnover may be required. Dissatisfaction alone may not be enough to produce job-leaving. And, conversely, job leaving cannot be attributed only to low satisfaction. Many surveys during the last decade have established that 89 to 92 percent of American workers say they are satisfied with their jobs (Gallup polls and others cited in Department of Labor, 1974). Labor statistics show the monthly turnover rate hovers around 2.1 percent per month--about 25 percent per year.

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The importance of perceptions regarding the potential for satisfaction in alternative job situations as a factor underlying quit rates has been supported by economists concerned with interindustry variations in quitting. In a study of manufacturing workers, Armknecht and Early found that changes in the availability of jobs have been the major discernible factor in the fluctuations in the quit rate of an industry (1972). This corroborates earlier research in British industries (Behrend, 1953). Since most workers cannot simply quit but must instead try to change jobs, the importance of dissatisfaction as a basis for the decision to quit, suggested by Parnes and Mangione, must be qualified by consideration of the worker's perception of the current labor market conditions. Possibly workers start organizing rational explanations, in terms of dissatisfactions, once they have started looking for another job. This possibility suggests that the correlations found by both Parnes and Mangione are not meaningful and that the supposed relationship between dissatisfaction and turnover may be spurious. Many more workers perform routine, alienating tasks but see no chance at improving their job situation; hence they do not bother to organize ideas about dissatisfaction. I expect that only those workers who define their current positions as temporary or soon ended are willing to tell researchers about major sources of dissatisfaction or to give negative overall evaluations of the current job.

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To restate the major criticism of the popular assumption that low job satisfaction causes high turnover rates, research evidence suggests that over 80 percent of the variation in rates of turnover over time can be accounted for by fluctuations in the business cycle that determine the difficulty of finding a new job (Department of Labor, 1974). One must ask whether the concern for finding the right job or the interesting job that workers expressed during the sixties might not reflect the tight labor supply in many areas. The structure of opportunity, in terms of labor market conditions, appears to have a great effect on quit-rates; it remains to be seen whether any aspects of organizational structure have an equally potent effect upon inter-organizational variations in quit-rates of each occupational group.

Rather than accepting the traditional assumption that certain organizational features, such as elements of bureaucracy or formality, inevitably produce dissatisfaction and high turnover, a more productive study requires the integration of ideas from mainstream social psychology with recent developments in the analysis of organizational and occupational structure, in an effort to establish some structural bases for worker concern with job performance.

Exchange Theory and Dedication to Work

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appropriate to apply to the sociology of work some more general ideas that exchange theorists use to explain behavior in general. One explanation of the processes, calculations and decisions required for an individual to enter into, continue or break off involvement in some activity or interaction was offered by Homans and further explicated by Blau and by current research on problems of equity.

Homans proposed that individuals engage in activities in order to achieve desired ends and that the intensity of the goal-directed behavior depends upon the desirability and likelihood of achieving the goal. He suggested that persons who feel they are over-rewarded will respond by increasing attention and effort to bring into balance this awkward situation, while those who feel underrewarded will be angry and less likely to devote attention and effort to the situation (1961). The exact conditions under which principles of equity are called into play, the size of differences from expectations necessary to change an actor's activity pattern and the importance of perceptions of alternative rewards from competing involvements have been investigated by a number of researchers and propositions regarding this entire phenomenon have been systematized by Adams (1965).

Many theorists concerned with work behavior have used exchange or equity-type assumptions regarding human motivation (such as the early idea that increasing pay

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would increase productivity of workers) but, until recently, few sociologists consistently acknowledged the similarity between work behavior and other exchange-based behavior.

When one analyzes the relationship between employee and employer, the exchange process involves costs to the worker, such as time and energy expended at work, and costs to the employer, such as salary, benefits and training. In the exchange, the costs of one become the rewards of the other. In analyzing these exchanges between employee and employer, one asks how much cost each protagonist must assume in order to induce the other to continue interacting. Most research investigating this type of exchange has continued to rely upon individualistic assessments of rewards and costs alone or, from the opposite perspective, has treated all workers as one group facing exchange partners in the form of more or less bureaucratic structures.

Recently, however, Faunce proposed a fresh explanation of differences in levels of self-investment in work, borrowing heavily from ideas suggested by researchers who explored the idea that workers are not wqually dedicated to work. Vroom and Dubin each brought to the study of work motivation some consideration of the place work has in the context of the individual's whole life, an idea sadly lacking in traditional studies of job satisfaction.

Faunce, Vroom and Dubin each were concerned with workers' statements about the importance of work to the self, ego or identity and each expected that such statements

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would be corroborated by actual behavioral variations at work. These three writers differ from the typical job-satisfaction or morale researchers in their recognition that satisfaction is meaningless if the activity or situation is not important to the satisfied individual. When work is meaningless and automatic, one's performance may not be critical to identity or self-esteem but one may still report satisfaction with work. In one discussion of this problem, Schacter et al. pointed out that assembly line workers typically say they are satisfied with their jobs and that this is possible because the assembly line operation "quickly becomes a peripheral, almost automatized or stereotyped pattern of behavior like walking" (1961). Because the work is so repetitious and automatic, it does not intrude on the individual's identity or demand much besides time. For the same reasons, satisfaction or the lack of it is unlikely to affect one's automatic performance very much. From the perspective offered by Vroom, by Faunce and a few others, only when work is less automatic and more important to self-evaluation does a worker become concerned about performance.

Faunce, for instance, suggested that people invest time and energy in those areas of life where success and consequent high self-esteem are expected (1968, 1972). From this perspective, workers who devote great amounts of time and energy to their work, even to the neglect of other roles, are those who see work as a major source of self-esteem and who value strongly a favorable self-image.

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Faunce suggested that white-collar work in general and prestigious occupations in particular are likely to be characterized by greater self-investment on the part of workers than are other occupations. This suggestion fits with earlier evidence that worker alienation decreases, as hierarchical level and status of work increases (Blauner, 1960).

The ideas elaborated by Faunce are logical extensions of the literature symbolic interactionists have produced regarding the concept of self-esteem. Rosenberg (1968) suggested that people select values, friends and situations (such as occupations) which permit maximization of self-esteem. Manis (1951) found that one's evaluation of self depends largely upon perceptions of evaluations made by significant others. The best way to maximize self-esteem, then, would be to concentrate time and energy in activities that demonstrate to others one's ability, while minimizing efforts in areas of incompetence (see Zaleznick, et al., 1970 for an example). Once central features of identity are chosen, individuals seem to be relatively impervious to inadequacies of performance in areas peripheral to this identity (one interpretation of Waisanen, 1962).

Only if work has been established as important to one's self-esteem will expectations of success or failure at work be important determinants of behavior. But since the structure of work determines the visibility of individual performance, the likelihood of recognition (flattery, pay

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If this hypothesis is correct, the observed relationship between status level of work and extent of alienation or dedication of workers suggests that most workers make a fairly realistic appraisal of the likely return on investments in different types of work. Thus the typical non-involvement of unskilled workers represents a socially rational decision to withhold energy from an area of life that offers little chance for individual recognition, challenge or reward (also see Chinoy, 1955).

One basic assumption of the proposed explanation of dedication and alienation is that occupational choice is not perfectly free. Assembly line workers are lacking in opportunity for involvement in work, rather than lacking in need for self esteem or in ambition. According to this model, the personal characteristics of workers are considered much less important than structure of work in determining the usual level of self-investment in work for members of each occupation. Probably, if individuals currently working in high status occupation, devoting much time and effort to work, were to start their careers again, this time in an assembly line, they too would exhibit, on the average, little investment of concern or interest in their work.

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The exchange assumptions underlying this model are reiterated in Faunce's suggestion that, even for very successful people, self-investment is likely to decrease if there is little likelihood of future return on self-investment (1972). Thus people approaching retirement, female workers and minority members may perceive little opportunity for returns no matter what level of status already attained. I expect that structural limitations on future returns will be more important than personal idiosyncracies or past experiences in predicting self-investment levels.

Partial empirical support for these hypotheses was offered by Sofer, who argued that advancement was of overwhelming concern to the middle-level British managers he studied (1970). In attempting to explain this phenomenon, Sofer, like Faunce, pointed to the literature on self-esteem maintenance, suggesting that, to bolster his self-esteem, a manager needs some movement along a gradient indicated by others and accepted by himself as appropriate for a person of his capabilities. Sofer suggested that colleagues and superiors were used as reference groups whose standards of success required career advancement in terms of status, pay and power (also see Tannenbaum, 1974).

In summing up the status of the self-investment idea, there are several reasons for continuing in this vein rather than the traditional job-satisfaction area. Since the propositions Faunce advanced are derived from theory

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and research on self-esteem, exchange relations and equity, since they make sense within that perspective and since they help to make sense out of the few established facts concerning sources of job satisfaction, this explanation of self-investment strategy seems to be worthy of further refinement and testing. While Faunce's explanation of self-investment shares many points in common with Vroom's analysis of ego-involvement and with Dubin's work on Central Life Interests of workers, Faunce's explanation of the phenomenon of worker dedication more clearly expresses the importance of social structural variables, particularly occupational and ecological variables, as determinants of worker perceptions and reactions and more strongly emphasizes the social nature of the standards used and goals sought by individuals making various self-investment decisions.

Both Faunce's self-investment approach and the earlier explanations of Dubin and Vroom offer more promising possibilities than a simple explanation that certain jobs or supervisory styles provide greater worker satisfaction (as Herzberg suggested). In fact, Dubin (and Orzack, who used his ideas) never asked if work was satisfying on its own. Instead, the emphasis was placed upon the importance of work in the context of ones' life, as a source of satisfaction for personal goals. By contrast, it appears that traditional job-satisfaction studies have confused a satisfactory job with a satisfying one (for instance, see Herzberg, et al., 1959). Even when there is little basis for

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worker complaint, a job may not call forth personal commitment or offer a means of satisfying needs for mastery, achievement (that Vroom postulated) or self-esteem (that Faunce, following Maslow, 1954, found crucial). Workers may consider such jobs quite satisfactory, even if commitment and energy-expenditure are held to minimum levels. No wonder Vroom's review of the literature showed, overall, only a .14 correlation between satisfaction and performance (1964)! In contrast, the propositions offered by Faunce, drawing partly on the work of Vroom and Dubin, made a valuable contribution by refocusing attention on the central question--what makes people see work as an important area of life--rather than asking what makes workers say they are happy.

Despite the usefulness of the work by Dubin, Vroom and Faunce, one problem that still remains is the concentration upon workers' feelings and attitudes as dependent variables. While purely attitudinal studies have been very popular in the research on work and organizations, there have been very serious charges regarding the meaning and usefulness of the concept "attitude" itself. In most social research, in fact, DeFleur and Westie (1963) and Blumer (1955) have suggested that attitude studies tell little about the relation of attitude to action. As an alternative, Blumer proposed that researchers concentrate on the self-interaction process in which individuals define and select aspects of activities that affect later actions.

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However, DeFleur and Westie contended that humans may be incapable of reaching the degree of introspection and discrimination Blumer's suggestions require.

In searching for an alternative to attitude studies, one must consider both types of criticism. Blumer's suggestion that one attempt to understand the individual's situation makes sense--but so do DeFleur and Westie's objections. Perhaps the answer is to eliminate concern for attitudes, per se, without forgetting that individual perception of the situation shapes behavior. As DeFleur and Westie suggested, one cannot have an attitude about everything--presumably some behavior at least depends upon changing definitions of situations, rather than stable enduring tendencies and preference. The importance of inserting a construct such as attitude between perceptions of the situation and behavior seems negligible. Thus Faunce's and Vroom's propositions suggest the social-psychological bases on which people base definitions of situations. Traditional job-satisfaction studies, on the other hand, offer no illumination of the principles under which people operate in defining their situations and offer no reason why the definition of a situation as "satisfactory" should have an effect upon behavior.

A more productive research program, then, might attempt to include objective descriptions of work structure (occupational and organizational variables), a description by the worker of the structure of his job and

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Unfortunately, researchers in the sociology of work have failed to adequately conceptualize the type of activity pattern in which workers can express high ego-involvement or self-investment in work. Even the literature on scientists and professionals, in which statements about alienation and commitment abound, gives little evidence of concern for specific behavioral indicators of commitment. Researchers feel they have done enough if they can point to the presence or absence of professional attitudes (as in Hall, 1968). The main alternative evidence of commitment that is used in such studies is a measure of individual success or failure, as evaluated by other experts (as in Pelz and Andrews, 1966). But commitment does not necessarily imply success that can be evaluated by outsiders. Some of the scientists studied by Pelz and Andrews, for example, may have been rated more successful because they were more brilliant. Perhaps brilliance plus commitment to work would have produced even more spectacular success!

The sole behavioral indicator of commitment that has been used or suggested is time-budgeting. Too often, however, the actual accounting is left solely to the subject so that grossly inaccurate estimates are likely. Such estimates may actually reflect imagined norms within an occupation, producing consistent over-estimation in

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some occupations and perhaps, in less prestigious occupations, tendencies to underestimate actual time spent on work. (Equity theory may help to explain such patterns of misperception.) While no other behavioral variable may make a good basis for interoccupational comparison, it might be wise to consider as well some variables that are intra-occupationally specific. The kind and extent of commitment activity possible may depend upon the complexity of skills and the obscurity of knowledge called for at work. Is there any kind of activity assembly-line workers can do, beyond basic job requirements, that could be considered evidence of dedication? Is it possible for such workers to be dedicated to a career (requiring change of occupation) but impossible for them to exhibit devotion to low skill work? Perhaps the whole notion of dedication to work, with its connotations of ego-involvement and self-investment, may be applicable only to work involving some minimum levels of complexity and thought. Faunce, however, suggests that danger may be an alternative to skill as an arena for dedication in some occupations. Thus, a courageous daredevil may be committed to work because he enjoys the exhiliration and status his style of behavior brings (1972). Whether some alternative to skill and knowledge is possible in every occupation is undetermined as yet. This project will consider only a few occupations that offer recognizable channels for worker dedication.

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In attempting to avoid the pitfalls of attitudinal research while investigating some ideas derived from Faunce and Vroom, this dissertation uses observations from the literature on organizational and occupational structure as a basis for predicting inter- and intra-occupational differences in worker behavior. Similarities and differences in structural patterns, rather than occupational labels, will be emphasized. Definitions of the work situation and traditional attitude scales will be compared to behavioral patterns characteristic of structural type to assess the importance of both perception and attitude as intervening variables.

General Propositions

Definitions

A. Self-investment: a process through which the degree of social encounters upon self-esteem becomes differentially distributed among social roles (see Faunce, 1972). Indicators of area of self-investment include use of various standards of performance, use of various reference groups.

B. Rewards: intrinsic or extrinsically derived gains from activity, perceived by individual to be contingent on own behavior, within limits imposed by structure (such as rules).

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C. Dedication to work: efforts to perform the work role well. "Well" is determined subjectively, based upon reference group standards. Indicators include low absenteeism, preparation for work in free time, extra time and attention devoted to work (or improving work situation) beyond that formally required for employment.

D. Purposive mobility orientation: Career planning strategy aimed at moves to more rewarding jobs; random, geographic and affiliative factors are unimportant in decision to quit or stay.

Propositions

Given that an individual believes rewards crucial to self-esteem are contingent upon own efforts, then

1. ↑perceived potential for reward at work→ ↑self-investment in work.
2. ↑self-investment in work→ ↑P (dedication to work roles).
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b. ↑perceived potential for reward at work→ ↑p (decision to quit is based on mobility orientation).

4. If occupational and/or organizational structure make purposive career orientation impossible to achieve (or to continue achieving), ↑self-investment in work→ ↑attempt to change structure of work (such as through unionization).

Thus attempts to change structure may be equivalent to dedication activity. Furthermore, it appears that perceived potential for reward at work includes perceptions regarding likely success of attempts to change structure. Thus,

a. ↑perceived success of change efforts→ ↑p (continued self-investment in work).

Organizational Settings

Since most work today takes place in some formal organizational setting, the characteristics of such organizations are important aspects of work environments. When researchers attempt to classify such environments, the first step is usually the labelling of the organization as bureaucratic or nonbureaucratic, followed by an assessment of the impact of the bureaucratic phenomenon (such as Scott, 1966). Despite the long tradition of handling bureaucratization as a unidimensional, dichotomous

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Weber suggested that the basic elements of rational organization included: the existence of rules, specified spheres of competence, delegation of authority, hierarchy, rationality derived from specialized training, separation of administration from ownership and written records (1947, pp. 330-2). In describing the condition of officeholders in an ideal bureaucracy, Weber proposed that they would be personally free, organized in hierarchy, have clearly defined competencies, freely contract to fill their offices, be selected because of technical qualifications, earn fixed salaries related to rank, be protected from arbitrary termination, and be promoted only according to seniority or achievement.

Although Weber's concentration on ideal types led many researchers to treat bureaucracy as a dichotomous variable, recent writers have shown that the pure type Weber described can be separated into elements that are primarily bureaucratic and elements more accurately described as rational (such as impersonality and technical competence--see Udy, 1959 and Stinchcombe, 1959). In fact, Hall's research led him to suggest that Udy and Stinchcombe did not go far enough in describing bureaucratic reality, since Hall found little concomitant variation among the

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Despite the ongoing debate on these issues, in this dissertation, the various elements of the bureaucratic model will be assessed and handled separately, with no preconceptions regarding types of bureaucratic patterns that might emerge. Among the advantages of this procedure are the following:

1. It is possible that each of the elements of bureaucracy may not have equal effects upon worker behavior, so that hasty labelling of organizations as bureaucratic or nonbureaucratic might mask actual effects of certain elements.
2. At the same time that my basic propositions are tested, the emerging pattern(s) of bureaucratic elements may provide an independent test of the dimensionality versus ideal type controversy already mentioned.

The major disadvantage to the separate treatment of the organizational variables is the added complexity of analysis but the avoidance of loss of information makes that seem an acceptable price.

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It must be noted that the dimensions studied will not be limited to those Hall found critical. Particularly, in this dissertation it will not be assumed that hierarchy and centralization of decision-making are synonymous as Hall assumed (1968). The observation that a given organization has few hierarchical levels and few managers does not necessarily mean that authority is centralized (see Blau, 1968 and Reiman, 1973 for evidence supporting this statement). After ascertaining the characteristics of each organization in the sample, I plan to consider the effects of variations in the pattern of bureaucratization upon behavior and perceptions of employees.

While an interest in the effects of work setting upon individual attitudes and behavior is not new, most writers concerned with this topic have assumed that increasing size and complexity of work settings has made work an alienating experience for most people (stemming from Marx, as interpreted by Blauner, 1964; Seeman, 1967; Israel, 1971), has decreased worker satisfaction (especially for professionals--see Scott's summary, 1966) and thus, makes workers less willing to invest energy and effort at work. The great concern with problems of professionals employed in bureaucratic settings stems from the supposition that the most idealized occupations in modern society are incongruous with the ubiquitous bureaucracy of contemporary work settings. However, few writers (notably, Hall and Blau, as previously mentioned) are

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Integrating pieces of evidence from a wide variety of research efforts, I came to conclusions quite different from the typical assumption that bureaucracy and favorable worker behavior and attitudes are always inversely related. Instead, I decided that each of the elements of bureaucracy should be considered separately, unless there is overwhelming evidence that a few dominant patterns of bureaucratization can accomodate most formal organizations without loss of critical information.

Looking at the elements of bureaucratization separately, there is reason to believe that not all of these elements contribute to worker alienation and lack of commitment. For instance, Scott and Mitchell suggested that both standardization and specialization of work may be related in a curvilinear manner to worker satisfaction, reasoning that lack of training and lack of knowledge about requirements of work are as frustrating to workers as are conditions that make work repetitive and boring, with satisfaction (and hypothetical dedication) being maximized at some point between these two extremes (1972).

One might expect that a similar relationship might hold for the effects of formalization upon attitudes or

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involvement of workers. The existence of formal rules and procedures may eliminate the necessity for close supervision of workers, an oft-cited irritant, especially frustrating to professional workers (Scott, 1966 summarizes this problem).

Greater technical expertise required of workers in the ideal bureaucracy might also have positive effects on worker performance and attitudes, making autonomy of workers a logical organizational strategy.

The unwieldly hierarchy of authority that typifies bureaucracy to most laymen is probably considered the most destructive element of bureaucratic structure, either because of conflicts between expert and administrative authority (Scott, 1966) or because hierarchy supposedly promotes close supervision and thus ritual conformity of workers (refuted by Blau, 1968 and 1955 and by Kohn, 1971). If one looks at the hierarchy of authority from another perspective, it seems likely that at least a moderate number of higher positions open for worker career advancement would probably have positive effects upon worker commitment and dedication. Only if the ratio of upper to lower level positions in a career chain is so low that no significant proportion of lower level employees are likely to move up would one expect the height of the hierarchy to have little effect. Some evidence for this idea was presented in a paper comparing quit rates of several occupations in a large organization. Both number of hierarchical levels and ratio of upper

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Blau proposed one further reason why the size and height of the organizational hierarchy may be important to worker dedication. He suggested that the effectiveness of non-administrative personnel may be severely limited if the administrative component is not large enough and integrated enough to handle the non-technical details of the organization (see Blau, 1966; 1968).

Thus, for a number of reasons, I propose that the level of bureaucratization of organizations is not directly related to alienation and job-leaving, but rather encourages commitment and dedication to work. It is not suggested, however, that this relationship will increase monotonically. Instead, I expect that excessive bureaucratization might reduce worker dedication--but so might insufficient levels of bureaucratization. This research project will include organizations varying in level of bureaucratization.

The Organization of Public Education

The public school system of this country would seem to be an ideal setting for the study of both organizational and occupational variations upon worker behavior since the range of such structural variation is fairly broad and yet there are basic similarities in the nature of work, background of workers and typical organizational form. Unfortunately, descriptions of the typical features of school

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structure are largely based upon understanding of the legal limits for such structure or upon descriptive work by educators. Only recently has there been any attempt to treat public schools as formal organizations amenable to analytical classification and explanation. In one summary, Bidwell points out that educators have failed to consider organizational attributes of schools (1965). Instead, educational researchers have been more interested in morale and in inter-personal relationships (pupil--teacher or principal--teacher), generally looking at schools from a human relations perspective (for examples, see Griffiths, 1962; Gutzels and Guba, 1957).

Recently there has been some attempt to delineate some aspects of the structure of public schools (such as Anderson, 1967; Carlson, 1958 and Gross, 1962, among others). One of the most comprehensive of the recent attempts to explicate school structure and show the effects attributable to structural variation is Corwin's study of 28 public high schools (1969). He found that the size, specialization, hierarchy, complexity and heterogeneity of staff characteristic of the schools were positively related to incidence of organizational conflict. This type of approach represents a significant advance from previous studies, typically centered around attitudes of personnel alone.

Despite the amount of inter-school variation in structure noted by Corwin (1969), Given (1969), Moeller and Charters (1966) and a few others, there are a number of similarities in school structures to be noted.

TABLE 1.--Organizat
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Orderly career mov possible for staff	
Authority vested i technically-qualif officeholders.	

TABLE 1.--Organizational Dimensions: American Public Education.

Dimension	Extent of Variation
Tenure of office	Universal for teachers, after probation. Short-term contracts for principals and administrators.
Separation of ownership from administration.	Universal.
Contracts specify salary in money.	Universal.
Written records	Universal (many records required by law).
Technical competence required for hiring	Universal (college courses certify expertise).
Hierarchy of offices explicated	Some hierarchy in all districts but some schools and districts have taller structures than others.
Universalistic criteria for hiring, promotion	Legally required everywhere, however, no uniform standards for measuring achievement.
Division of work into specialities.	True in most high schools and 40 percent junior highs (Corwin 1965) but not true in rural and elementary schools usually.
Rules define procedures, conditions and rewards	Every district has some rules but there is great variation in the content, complexity and application of rules.
Orderly career movement possible for staff.	True in districts with elaborate hierarchies and specialist departments (Lortie, 1969).
Authority vested in technically-qualified officeholders.	Administrators usually have teaching backgrounds; wide variation in the levels at which various decisions are made.

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TABLE 1.--Continued.

Dimension	Extent of Variation
Nature of work	All schools take custody of minors in certain age ranges. Some districts and schools provide expensive auxiliary services, socialization, technical training or adult education beyond basic legal requirements.

Occupational Characteristics

Beyond differences in bureaucratization, organizations also differ in the number and type of occupations whose members are required to carry out various aspects of organizational tasks. Since the kind of technology used in the organization shapes the nature of the work to be done as well as the kind and extent of training required of various categories of employees, it seems possible that the characteristics of many occupations may be affected by the structures of organizations typically employing members of these occupations.

Thompson, Avery and Carlson have thrown some light on the relationship between occupations and work settings in their explication of the bases along which occupations vary (1962). They proposed that the main dimensions along which occupations vary are career ceiling (early or late) and major source of occupational definition, which could be collegial or organizational. Combining these variables

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to form four basic occupational types, Thompson et al. predicted that typical career patterns for each structural type would be quite different, revolving around four basic patterns--occupational commitment, organizational commitment, both or neither. This approach offers a useful static picture of occupational differences.

To comprehend the dynamics of career movement and to understand the reasons why some occupations have late ceilings, we can turn to another idea of Thompson's. He proposed that the visibility of decision-making ability of job incumbents is crucial to career movement within an organization (1967). That idea has been advanced by Perrow as well (1970). Two elements may be extracted from that proposal: first, that some type of performance must be visible to superiors or colleagues and must be evaluated and, secondly, that the area of performance must be critical and valuable to the evaluators. For instance, decision-making may be a highly-valued, scarce resource to an organization or originality of ideas may be important to colleagues but typing ability, for example, may be less valuable and less scarce, even though it is observable to superiors.

It seems likely, then, that some occupations might impart to members scarce and needed skills but that lack of observation and evaluation of performance might produce an early career ceiling for typical occupational members. Other occupations may be concentrated in work settings where observation and evaluation of skill are routine, even though

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the skills observed are less important to superiors or colleagues. Organizational structure obviously can affect typical career ceiling, since the formal structure determines whose skills can be observed and evaluated by relevant audiences. Lack of supervisory personnel suggests not only the improbability of evaluation of some workers but also the lack of possible positions to be offered as incentives for dedication. These ideas receive some support from Woodward, who showed that most top management personnel began their careers in the occupation whose duties were most central to organizational task success (1965, p. 220).

The structure of the work settings for some occupations, however, makes it difficult for work to be observed by the desired evaluators. For example, much of the work of MDs is observed only by patients with little knowledge of medical standards just as much of the activity of professors is observed only by students who have little basis for judging adequate performance and whose judgments may not be very important to colleague-oriented professors. Medicine and academic specialities offer members the possibility of reaching an audience of colleagues and receiving rewards by publishing in specialized journals. Many occupations struggling to achieve professional status, with the implications of colleague-definition and specialized knowledge not available to lay people (Goode, 1960), lack such forums for assessing colleague performance and lack inter-organizational measures of performance. (For example,

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public school teachers and nurses may read professional journals but the contents are typically written by PhD or MD specialists, not by other teachers or nurses; there is no expectation that good performance of these occupational roles includes publications that advance knowledge in the field.)

While generalizations about the range and typical pattern of occupational variables is valuable, it is important to consider the effects that variations in organizational structure may have upon the place of employee members of various occupations. Obviously, the role and visibility of teachers in small rural schools may be very different from those of their counterparts in huge urban schools. The scope of activities required may vary, the number and positions of evaluators may vary and the bases and rewards for good performance may also vary. In order to talk about either occupations or organizational structures as variables affecting work behavior, dedication, attitudes, interaction patterns or a great number of such dependent variables there must be systematic variation of both structural variables. It cannot be assumed that highly bureaucratic structures, for example, will always affect employees of a given occupation in one way (or vice versa). Instead, the nature and universality of such relationships must be established empirically. Probably, both structural elements will be important determinants of dedication to work. The types of activity that constitute dedication may also vary according to both

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As an application of specific principles of motivation and structure, for example, one might expect that the activity pattern called dedication to work is more characteristic of late-ceiling occupations and that the type of activity that constitutes dedication will depend upon the source of occupational definition and the visibility of behavior to important referents. Simply phrased, dedication will probably occur in the form most likely to make a career movement possible.

There is some support for this proposition--for example, Vroom and MacCrimmon showed that the decision to quit one organization was a negative function of expectations of future rewards (1968) and suggested that the organizational career strategy depends upon perceptions about opportunities outside the organization as well. Sofer (1970) found that managers (organization-defined, late-ceiling occupation) were preoccupied with promotion chances and very concerned about trying to use more of their skills and improve their performances (pp. 300 and 330). Smith found that quit-rates were inversely related to height of job ceiling within one organization (1974). Also see Grusky, 1966; Buchanan, 1974 and Tannenbaum, 1974.

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age as variables supposed to explain worker behavior. I expect that the opportunity structure faced by workers will be a better predictor of behavior than age, sex, and personality, although these may certainly affect perceptions of structure and of alternatives. I expect, for example, that much of the difference between male and female workers' behavior can be attributed to differences in the structure of "male" and "female" jobs. Thus, older workers or females in one organization or occupation may behave like young or male workers in a different job setting.

Upon examination of the characteristics and settings of late ceiling occupations, one realizes that those occupations most likely to require complex or rare skills and thus to permit late career ceilings are managerial and professional occupations. While the organizational structure promoting late ceilings seems to fit well with managerial occupations, in recent years there has been great concern that professionals and bureaucratic settings are logically incompatible.

Many types of work bearing most hallmarks of professionalism, however, can only be carried out in settings characterized by some elements of bureaucracy (see Friedson, 1974). Schools and school districts, for instance, appear to be somewhat bureaucratized, yet several types of expert work can be carried out only in schools. Teachers, principals and school superintendents may vary in the nature and extent of expert training but each occupation has some claim

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to professional status. Is it then impossible for members of such organizationally situated occupations to develop cosmopolitan orientations, with such ideal professional traits as flexibility, innovativeness and independence?

A variety of research evidence led me to believe that the affirmative answer suggested by Scott and others needs qualification. For instance, in Carlson's study of school superintendents, variations in cosmopolitanism were shown to occur even in an organizationally-linked occupation (1962). Furthermore, Blau showed that bureaucratic officials are not always ritualists determined to avoid change, and suggested that government agents discriminated between several types of change, accepting some. Blau found that those most resistant to change were workers lacking job security. This led Blau to suggest that, since tenure of office is a major criterion of bureaucracy, bureaucratization may produce less ritualism on the part of employees than would other work situations (Blau, 1955). It appears that only when insecurity pervades the work situation and when employees are completely dependent on superiors' evaluations that risks must be avoided, promoting rigid adherence to established procedures.

Further evidence on this question was provided by Kohn. In a study of 3000 male workers in the U.S., Kohn found that those employed in bureaucratic settings were more intellectually flexible, self-directed in values, and open to new experiences, even when respondents' education,

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level in the hierarchy of work and nature of work were controlled. Kohn suggested that job security, heavy work load and requirements for speed found in the more bureaucratic settings may have encouraged workers to try new ideas without fear of reprisals from superiors (1971).

Thus it appears that the presence or strength of desirable professional traits like cosmopolitanism or flexibility may not necessarily be negatively related to bureaucratization of work setting. This is an important point, since there is fragmentary evidence that such traits may be related to behavior I have called dedication (Glaser, 1964).

Occupations in Public Education

Several of the distinctions suggested regarding occupations in general may be critical in predicting the effects of variations in the structure of public education upon the behavior of members of occupations connected with education.

This dissertation will consider two occupations where administrative and managerial skills are the main areas of expertise (elementary and secondary principals) and two occupations where non-administrative, technical training provides the basic skills and where the work itself is more technical than administrative in nature (elementary and secondary school teachers are in this category). Such a fourfold categorization offers many advantages since one

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can simultaneously compare behavior of teachers and principals in any given school, elementary and secondary teachers in a given school system, elementary and secondary principals in that system, etc. Studying both elementary and secondary schools offers the advantage of slightly expanded range of variation in structure and also allows one to examine the effects of school system variables upon the structure of schools in a system. The inclusion of elementary school principals should permit the separation of occupation and sex as independent variables affecting behavior, just as the inclusion of secondary teachers allows for the comparison of male and female responses in the same occupation and organization.

The four occupations chosen, while similar in setting, are different enough to permit testing of some of the ideas already proposed, especially those concerning the effects of career ceiling, source of occupational definition, visibility of performance to colleagues and superiors and criteria of performance.

The following chart summarizes data supporting the treatment of these occupations as meaningful and distinct entities. While the distinctions between elementary and secondary teaching are well documented and accepted, it may be necessary to elaborate upon the rationale for treating elementary and secondary principals as members of distinct occupations. One obvious reason for this decision is that individuals cannot move between the two types of

TABLE 2.--Characteristics of Occupations in Public Education.

	Occupations	
	Teacher	Principal

TABLE 2.--Characteristics of Occupations in Public Education.

	Occupations			
	Teacher		Principal	
Characteristics	Elementary	Secondary	Elementary	Secondary
Place in Ed. hierarchy	Low	Low-Mod.	Mod.-High	Mod.-High
Typical career ceiling	Early	Early (later than elem.)	Late	Late
Relative Social Status	Lowest	Low	Moderate	Highest
Salary	Low	Low (but possible extras)	High	High
Specialization of activity (usually related to size)	Low (by age)	Moderate (by subject)	Moderate	High
Education needed	BA, BS	BA, BS	MA+ (Ed. Spec., some	MA+ districts)
Minimum Experience	Student teaching	Student teaching	Few years teaching Elem. schl.	Few years teaching Sec. schl.

TABLE 2.--Continued.

Characteristics	Occupations			
	Teacher		Principal	
	Elementary	Secondary	Elementary	Secondary

TABLE 2.--Continued.

Characteristics	Occupations			
	Teacher		Principal	
	Elementary	Secondary	Elementary	Secondary
Work content	Teaching socializing	Teaching career prep.	Admin, supv. personnel	Admin, supv.
Isolation at work (from colleagues)	High	High-Mod.	Mod.	Mod.-Low
Basis for salary	Collective negotiation	Collective	Individual	Individual
Tenure	Permanent, after prob.	Permanent, after prob.	Contracts renewable every 2 or more years	
Job market	State, area	State, area	National	National
Status of clients	Very low	Low	Moderate (Young parents)	Mod-High
Freedom of choice	None	Moderate	Moderate-High (parents complain to supt.); principals do not have tenure.	

Sources: Etzioni, 1969; Lieberman, 1956; Geer, 1966; Lortie, 1969; Ladinsky, 1967; Reiss, 1961, Saxe, 1968; Hansen and Gerstl, 1967.

principalship without further training and experience, since districts usually require teaching experience at the elementary level as a prerequisite for principals at that level and require secondary teaching experience for prospective secondary principal.

A further reason for distinguishing these two occupations is that the content of these jobs may be very different, partly because of the differences in the age, needs and behavior of students and partly because school organization is very distinctive at each level. While there are typically a few large, diversified secondary schools in a district, there are usually many more small, internally homogeneous elementary schools. The kind of decisions the principal must make, the typical relationship between principal and teaching staff, the number of levels between teachers and principal, and the observability of principal decisions to teachers, parents and other principals and superiors may vary by school level. Although both principal occupations may have potentially later career ceilings than do the two teaching occupations and although the principals are likely to have a more cosmopolitan outlook, there are some bases for expecting elementary and secondary principals to differ attitudinally and behaviorally. Unfortunately, principals have not been subjects of research to the same extent that teachers have been and the existing research tends to concentrate on the relationships between principal and teachers in a given school, rather than

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comparing and contrasting principals by level, district, experience, etc. One example of the latter approach is Rock and Hemphill's report on characteristics of junior high school principals (1966).

Effects of Organizational Variations Upon Occupations in Education

In the last section, several types of variation in the structures of public schools were described. For each type, the possible variations could be considered more or less bureaucratic, according to their fit with the characteristics Weber used to describe bureaucracy. For instance, schools with formal, written rules and records would be considered more bureaucratic, along that dimension of bureaucratization, than schools without such written rules. The possible effects of greater or lesser bureaucratization of organizations were considered, in a general way and also with specific reference to "professional" occupations (that is, those with some claims to that status, not just the traditional list). As a basis for making predictions about the behavior of those employed in public education, it is important to explicate the mechanism relating organizational structure to activity of occupational members. I propose that various aspects of the organizational structure of schools will be consistently related to variations in the behavior of employees, through changes in career ceiling and visibility.

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As one clear example of the mechanics of this relationship, consider the implications for teachers if a school or school system emphasizes standard evaluation of pupil progress, has well-defined rules for communication and for limiting responsibility of workers to specific tasks, uses rational criteria for hiring, assigning and evaluating workers (i.e., based upon expertise in field of specialty), permits decision-making at the level of greatest expertise for each decision area and, in general, approaches the more bureaucratic end of the various contina making up bureaucratization. In such a situation, teachers may have a higher career ceiling, since specialization allows informal status ranking by expertise (and if formal specialization has progressed to the point of creating departments, the existence of the position of department chairman allows a vertical move without leaving the area of teaching expertise). Furthermore, individual performance and use of discretion may be more visible to superiors as well as to peers, since responsibilities are well-defined, records kept and some decisions made by teachers.

In less bureaucratic schools, particularism, diffusion of responsibility and lack of records and hierarchical distinctions might make it less possible to observe, evaluate or reward good teaching performance. Such structures might also prevent the formation of effective colleague control of performance, since less specialization means coworkers either would not be experts at all or would have

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no basis for judging others' expertise. Lack of specialization would make it very difficult to hire teachers on the basis of their knowledge or their records, since the requirements and standards of performance of very diffuse jobs are much more difficult to specify.

At first glance, it seems likely that secondary and elementary schools will not even overlap in their range of variation on the above dimensions. While it is likely that secondary schools have been forced to be more bureaucratic in a number of ways, elementary schools have moved in this direction as well and districts have varied enough in their organizational change rates that one could hope to find overlap between levels on at least some of the dimensions of bureaucratization. For example, elementary teaching jobs have been much more explicitly defined recently, partly because of the collective-bargaining for contracts. The presence of auxiliary specialists--medical, social, psychological and testing experts, for instance--as well as the hiring of luncheon and playground supervisors and teachers aides relieve teachers of many of the non-teaching requirements that used to be part of their jobs. This process has gone on at both the elementary and secondary level. For both levels, then, one could classify schools on the basis of two aspects of specialization: are there auxiliary non-teaching specialists, so that teachers at least specialize in teaching?, and are there divisions within the school on the basis of subject-matter expertise?

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A further type of specialization could be measured by asking how many courses outside ones major in college each teacher was required to teach. As long as more than one school district can be studied, it is very likely that a certain amount of variation on these dimensions can be uncovered and that there might be some overlap between elementary and secondary schools. And, if the specialization and hierarchy elements truly affect career ceiling and visibility, some concomitant variation in the behavior patterns of teachers might be expected.

Some of the research on education and the professional occupations in general may be useful in explicating the relationship between school structure and work behavior. I do not suggest that school structure differences can explain all the difference in behavior patterns of teachers and principals but the analyses of schools and teachers found in the literature tend not to consider the element of structure very seriously. Many variables that seem to be occupational in nature may be greatly affected by the structural setting of work.

For example, in one consideration of the characteristics of teaching, Geer pointed out the importance to scholars of an expert audience composed of colleagues competent to judge performance. Since pupils are in the process of learning, they have little basis for judging teachers' mastery of a subject or pedagogic ability and hence their approval is not as meaningful as is colleague

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recognition in other professions (Geer, 1966). While this perspective may correctly assess the historical situation of public school teachers, it does not take into account the impact of different organizational structures. In more highly bureaucratized schools, specialized departments may develop systems of consultation, observation, evaluation and reward for expertise in subject matter or technique. When departmental colleagues collaborate to design a sequence of new courses, to work as a team in teaching some subjects or to make suggestions on texts, such focused interaction provides each teacher with a trained audience capable of evaluating performance according to at least minimal standards held in common. Presumably, when there is an audience of specialists to appraise performance, people care more about performance levels. In traditional professions, part of the basis for such concern about performance lies in the fact that the critical audience of colleagues has some sanction powers. While teachers need not worry about losing a license, or if tenured, clients because of poor professional performance, schools organized into departments and allowing decisions to be handled by the level with needed expertise offer some sanction possibilities to teachers. Movement to the position of department chairman is probably somewhat affected by colleague evaluations of expertise and since this movement is practically the only hierarchical change possible for a career

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In another explanation of the peculiarities of the teaching occupations, Lortie pointed out that both the solitary training and socialization of teachers (1968), and the isolation of teachers from each other during work (1969), produce an individualistic, rather than colleague-oriented approach to work problems. The lack of any structural support for collegiality seems critical to the failure of teachers to develop strong ties in an occupational network. Paradoxically, it may be possible that breaking up the teaching task into less complete tasks (normally considered an anti-professional trend) might help to provide some support for collegiality and thus produce work behavior geared toward colleague approval. In supporting the idea of specialization as a basis for collegiality, it must be remembered that the definition of colleagues would shift--not all secondary teachers but only French teachers or math teachers would be classified as colleagues capable of evaluating performance.

Another possible advantage of departmentalization was suggested by Lortie. He pointed out that, through formal and informal meetings within a specialty department, there might be developed at least a first step toward a body of expert knowledge to be applied by all the teachers during the course of work. This possibility would be strengthened by team teaching practices since teachers

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working together may begin to codify their experiences as the established professions have done (Lortie, 1969, p. 43).

These ideas about the advantages of greater division of labor within schools appeared to be incorrect in Hall's study of bureaucracy and professional. He suggested that the two phenomenon were, in general, inversely related and that, specifically, the extent of division of labor was negatively related to professional attitudes of workers. However, he admitted that this relationship need not hold when specialization occurs as an occupational rather than an organizational phenomenon (Hall, 1966). Obviously, however, specialized teachers can be forced to teach non-specialized subjects if the school structure does not permit more than rudimentary division of labor. The other aspect of specialization within the organization (the creation of chairmanship positions) would probably have no ill effects upon professional attitudes, since Hall found that hierarchical authority seen as legitimate by the professionals did not have such effect upon professionalism (1966). Since technical expertise is essential to beliefs of subordinates regarding legitimacy of superiors, the legitimacy of department heads who are trained in the departments' speciality probably is not questioned (and their legitimacy probably relieves the principal of problems caused by his lack of training in some subject areas).

The extensive literature on bureaucratization and professionals need not be applied too rigorously to the

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occupations of teacher and principal, partly because these occupations can occur only within some type of organizational setting, with at least rudimentary hierarchy distinctions implied by principalships. Since Hall pointed out, too, that professional attitudes appeared to be unrelated to objective indicators of occupations' professional status (1966), the great emphasis on feelings and attitudes in that body of investigation may be unwarranted. The most popular stereotype of a professional may suggest the best kind of data to collect to use in constructing indices of professionalism. The popular stereotype concerns the activity pattern of a real professional--someone who is totally involved in work. Such involvement probably requires that the work be interesting and challenging (more likely if specialization in a field of expertise is required), that there be some way of measuring success or failure (more likely, for teachers, if standard tests are routinely given to students and if colleagues can evaluate teaching efforts), that there be some ways in which workers can make extra efforts (perhaps not possible in some occupations) and that there be some payoff for extra effort (such as a late career ceiling, visibility of good performance to others, etc.). I suggest that, for occupations in general and for teachers and principals in particular, several aspects of bureaucratization encourage dedication to work.

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school structures, so that the effects of organizational and occupational variables can be separated.

As for the kinds of behaviors that comprise dedication for teachers and principals, the popular stereotype of a professional offers the appropriate indicators. A truly dedicated teacher or principal would make great efforts to keep up in his or her field, with coursework, reading or attendance at conferences, seldom miss work and stay in education indefinitely. Some alternative indicators of dedication, such as time-budgeting and concentration on student problems, will not be considered because of ambiguities in meaning or probable biases in measurement. For those activities that will be measured, though, I expect that several aspects of bureaucratization of schools will encourage teachers and principals to exhibit high levels of dedication to work.

Adaptation of the General Propositions to The Case of Public Education

Given the evidence regarding differences in opportunity structure among the occupations in public education, the general propositions lead us to expect that:

1. In general, the occupation of school principal offers more rewards than does the occupation of school teacher. (Principals have more autonomy, more scope for decision-making, less routinized work, earn higher salaries, receive greater

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status in the community, have later career ceilings and are more visible to collegial and organizational evaluators than are teachers).

2. In general, occupations at the secondary level offer more rewards than occupations at the elementary level. (Greater specialization at the secondary level permits concentration of energy in areas of expertise, making work more interesting and allowing the recognized expert more freedom from parental interference or organizational rules on course content; the possibility of later career ceilings and expert peer audiences become important in departmentalized schools. The prestige of secondary personnel is higher than that of elementary, the "clients" of secondary personnel have higher social status, and the activities of secondary schools are usually the subject of community, not just neighborhood interest, making the performance of secondary teachers and principals more visible.
   a. Thus, ceteris paribus, principals should have higher levels of self-investment in work and behave in a more dedicated manner than teachers. Secondary personnel should have higher self-investment in work than elementary personnel and should behave in a more dedicated manner than elementary personnel.

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3. Within each occupational category, variations in organizational structure should have noticeable effects on self-investment levels and dedication to work. Personnel in schools with more hierarchical levels, greater division of labor, greater expertise of employees, greater emphasis on universalistic standards of evaluation and permitting decision-making at the level of appropriate expertise should exhibit greater self-investment in work and greater dedication, behaviorally, than do their counterparts in other schools.
4. Sex and age of worker may affect perceptions of reward structure because of societal discrimination against older and female workers. The relative importance of sex and age of worker, compared to structural variables, will decline in school offering evidence that older and female workers can achieve career success.
5. Principals should exhibit a more purposive mobility orientation than teachers; secondary personnel should have stronger mobility orientation than elementary staff.

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CHAPTER III

METHODS OF DATA COLLECTION AND ANALYSIS

Introduction

This chapter outlines the design of the research, describes the collection of data and defines in operational terms the concepts used in the propositions developed in the last chapter.

The research project weighs the impact of several structural variables--hierarchy, specialization, centralization, formalization, universalism in evaluations, among others--upon teachers' and principals' dedication to work. Furthermore, this project attempts to clarify the relationship between dedication behavior and those attitudes generally considered characteristics of professionalism, such as idealism and cosmopolitanism. Finally, this project compares the relative importance of structural variables versus individual variables like age and sex in order to ascertain the role each plays in explaining dedication to work, professionalism and job-leaving of teachers and principals.

As a basic step in accomplishing these objectives, the project also investigates the interrelations between

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bureaucratic elements and rational elements in formal organizations, providing new information in an area of major concern to students of bureaucracy. Explication of the patterns of organization in public schools will also contribute to a neglected area of educational research.

Research Design

Testing the propositions developed in the previous chapter requires a sample of schools that vary in internal structure, within districts that vary in structure as well. To meet these broad requirements, 53 public schools from 5 districts in Michigan were selected for study. Fifteen of these schools were secondary (three from each district) and 38 were elementary schools. This sample permits comparison of four district occupations, principals and teachers at both levels, and also permits a greater range of structural variation than would be likely if only elementary or only secondary schools were studied. The sampling strategy permits movement between several levels of analysis, since district patterns, school variables, occupational patterns and social-psychological variables can be isolated and analyzed separately. The inclusion of district organizational variables and community factors is of critical importance since many of the items usually cited in explanations of the satisfaction levels of professionals, such as autonomy, recognition and adequate working conditions, may

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Original data were collected by Dr. Philip Marcus and assistants in 1968 and were partially analyzed by that research team (Betz, 1968; Given, 1969). This dissertation requires the use of all data collected regarding school and district organization and most perceptual, attitudinal and behavioral data on teachers and principals. Earlier analyses did not consider the principal data at all and never considered both elementary and secondary teachers concurrently.

For a full description of the logic of the sampling, see Betz, 1968, and Given, 1969. The research sites were selected so as to control for environmental variables that might contaminate the analysis. The comparability of the research sites is of major importance because of the tradition of "grass roots" control characteristic of American education. When educational policy is formulated at the local level, the wealth and size of the community, its industrial base, its occupational and ethnic composition all become important factors shaping the educational policies of the district. Depending upon importance of education to local residents, one would expect to find variations in physical plant, salary range and success of bond issues, as well as in less concrete evidences of concern (such as prestige accorded educators, delegation of authority to trained personnel, insistence upon adequate training of

TABLE 3.--Social and Economic Characteristics of Cities Comprising Five School Districts Used in the Study.

	I	II	III	IV	V*
Urban Size	112,000	197,000	177,000	108,000	98,000
Median school years completed	12	10.9	10.8	11.9	10.3

TABLE 3.--Social and Economic Characteristics of Cities Comprising Five School Districts Used in the Study.

	I	II	III	IV	V*
Urban Size	112,000	197,000	177,000	108,000	98,000
Median school years completed	12	10.9	10.8	11.9	10.3
Percent employed in white collar occupations	53.4	36.4	45.6	48.6	41.0
Median Income	8,195	6,340	6,068	6,477	5,921
Total number of certified teachers	1,264	2,050	1,600	1,750	1,024
Pupil-Teacher Ratio	22.8	25.9	24.1	20.9	24.7
State equalized valuation per membership pupil	34,902	17,807	18,974	16,239	16,957
Minimum salary schedules for 1967-1968	6,500	6,050	6,000	6,000	6,200
Allocated Operating Mills	8.90	9.38	10.10	9.20	10.05
Total number administrative units in district	31	54	62	56	47

Sources: 1960 Michigan Census; Michigan District Data Study, 1967-68, by S. Hecker and T. Northy, Michigan Education Association, 1968; Michigan Public School District Data, 1967-1968; Michigan Education Association, East Lansing, Michigan, 1968.

*Henceforth districts will be referred to by Roman numerals.

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teachers, etc.). These factors may in time have a significant effect upon the quality of the schools and upon the organizational and occupational commitment of teachers and principals (Coleman, et al., 1966; Jencks, 1972).

Betz described the rationale for district selection: "To eliminate extreme variations, larger districts serving urban areas were selected because they would most likely have a diversified industrial base, a broad occupational composition, similar tax bases and a comparable set of values toward education. Since most large urban school districts correspond roughly to city boundaries, the Michigan Census was used to select cities where the study could be undertaken. Michigan, in 1960, had six urban places where 100,000 or more people live, with five of these places containing districts of about the same size" (1968). Since the sixth, Detroit, was very much larger than the others, it was eliminated and the five comparable areas were studied. (See Table 3.)

As the table shows, the five districts are similar in pupil-teacher ratio and in starting salary for teachers. Some differences in socio-economic status of district residents is suggested (from median school years completed, income and percent in white-collar jobs) and verified in Table 4, but no district is different enough to introduce great bias. The most important difference among the districts is the state equalized valuation for District I, reflecting the high property values of that district and

TABLE 4.--Econom
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Characteristic	
SES mean score*	
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Mean student ability score	
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TABLE 4.--Economic and Student Performance Characteristics of Schools, by School Districts.

Characteristic	School District 1	2	3	4	5
SES mean score*	52.8	45.9	47.8	48.4	45.4
SES variance	9.4	10.8	11.1	11.0	11.0
Mean student ability score	53.7	47.1	48.1	48.7	46.2
Ability variance	7.8	9.2	9.5	9.0	9.4
State Aid/school	$12,539	$29,366	$30,687	$29,890	$31,056

Source: Michigan Department of Education School Census of 1970. Composite scores of 4th and 7th graders are used here.

*The mean for the State of Michigan was 49.6 and the range was 45.0 to 54.3 for 612 school districts.

the large industrial concern located in that district. While this difference does not prohibit comparison among the schools, the effects of district-level variables may be raised during the analysis.

The Sample

Once districts were selected, individual schools in each district were categorized into three sampling levels: kindergarten through the sixth grade, seventh through ninth grades and tenth through twelfth grades. To insure comparability in drawing the sample, several schools which did not conform to this gradation were eliminated.

TABLE 5.--Total
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Total number of usable administrative units:	
K-6	
7-9	
10-12	
Range of faculty size:	
Elementary	
Secondary	

Sources: 1967 D

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TABLE 5.--Total Number of Usable Administrative Unites in Each Grade Category and Their Range of Faculty Size by District.

	District				
	I	II	III	IV	V
Total number of usable administrative units:					
K-6	17	40	48	48	30
7-9	3	9	6	5	5
10-12	3	4	5	3	3
Range of faculty size:					
Elementary	7-26	14-49	4-23	8-30	7-40
Secondary	40-103	68-78	17-86	71-101	51-89

Sources: 1967 District Handbooks.

The districts seem comparable, with a few exceptions. In District 1, there are only three 7-9 and only seventeen K-6 units from which to sample, since several schools in that district had grades K-9 and therefore were not included in the sampling population. Similarly, two primary schools (grades K-3) did not correspond to the stratifying rules and were eliminated from the sampling population.

Despite such minor differences, there is considerable similarity in range of faculty size when districts are compared and the elementary and secondary schools seem to have fairly distinct size characteristics with little overlap.

From this sampling frame, the researchers randomly selected one school from each of the 10-12 levels, two from each of the 7-9 levels and about 20 percent (but no fewer

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than 6) from the K-6 levels. Thus six elementary schools were selected from the districts with relatively few schools (I and V), eight were chosen from the district with a moderate number of schools (IV) and nine were chosen from the larger districts (II and III). All of the selected schools agreed to participate in the study. The average teacher response rate was 82.8 percent. (Further information behind the decision to use all sampled schools can be gound in Given, 1969; Betz, 1968). Questionnaires were distributed to teachers and principals in the sampled schools, yielding data on personal and career history, attitudes and activities and perceptions of school structure. For this dissertation, however, improved measures of authority relations and of the schools' environmental setting were developed.

To obtain better measures of Socio-Economic Status (SES) than overall census indicators for cities, data from the Michigan School Census of 1970, collected by the Michigan Department of Education, were used. Since SES and student body composition do not change radically from year to year, we assume that the 1970 data would provide a good estimate of conditions at the time of the original survey two years before.

SES and skill levels are determined in the school census using the responses of 4th and 7th grade students to a battery of skill tests (e.g., verbal, mathematical

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and social categories) and a survey regarding family life-style, parental occupation, education and other presumed components of SES. For every Michigan School district, elementary school and junior high school, the means and standard deviations for SES and student ability have been calculated, providing data on inter- and intra-district variations in level of SES and ability and on homogeneity of school composition. (Detailed information on the sample, survey questions and tests can be found in the Michigan Department of Education's Technical Report on the 1970 School Census.)

Documentary sources of data included employment contracts between each district and its teachers' association for the 1967-8 school year (which were used to ascertain the level of formalization of each school district and to assess the legal limits and guarantees on principal and teacher autonomy), the district directories for 1967-8 (from which inferences about specialization and hierarchy were made), the Michigan Education Directory for 1966-7 and for 1967-8 provided rosters of principals in each district, thus permitting the calculation of principal turnover rates during the focal year.

Measurement of the Variables

The independent variables discussed in the previous chapter concerned the structure of work and some personal characteristics of individuals. While the personal

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characteristics are simple and easily operationalized in the survey by asking respondents' age, sex and work history, the structural variables are more complex. Basically, three sets of dimensions underly a job's opportunity structure--occupation, organizational structure and environment.

Occupation

In the survey, respondents were identified by their school and position, yielding four categories--elementary and secondary principals and teachers. Teachers described their current positions so that student or substitute teachers could be eliminated and so that tenure status could be controlled, if desired.

Data are available for 53 principals--15 secondary and 38 elementary--and for 1,413 teachers--850 secondary and 563 elementary. Data concerning different types of classroom teachers will be presented in the section on specialization.

Organizational Structure

Since schools are part of districts having distinct organizational patterns, both types of organization may be relevant to the propositions. Within each organizational component, I will describe both types.

The specific components of school structure measured, the source of data for each component and the range of variation for each item will be described next.

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School Hierarchy.--For any particular school, the pattern of hierarchy could be described as one of only four possible forms (see Figure 1). Only two position levels were possible steps in a professional hierarchy with the principal at the top and classroom teachers at the bottom. Other personnel involved in auxiliary hierarchies were not considered critical and were not examined. Type 2 and type 3 are considered equal in meaning in a hierarchical sense, although they suggest differences in specialization and span of control.

The existence or absence of each type of intermediate position was determined from questions asked of principals (see Appendix B). Using principal responses, it was possible to assign a number (0, 1 or 2) to each school, representing the number of position levels between principal and teacher, excluding clerical and auxiliary specialist positions. Table 6 presents the mean number of intermediary levels in schools in each district, as well as the distribution pattern. This table suggests fairly large inter-district variations in hierarchy, with district 1 schools appearing to have the most hierarchical arrangements. It is essential, however, to note that the number of elementary schools studied in each district is not equal, and that there are different patterns in elementary and secondary schools. When similar ratios are calculated just for schools of each level, combining them across districts, the mean number of intermediary levels in secondary schools

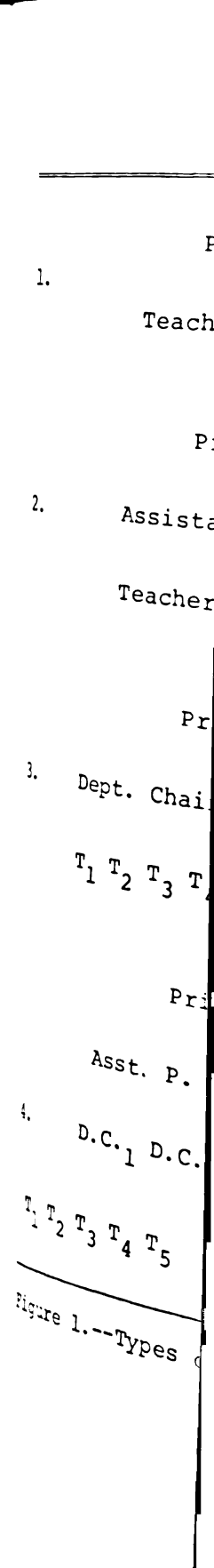

Figure 1.--Types

1.	Principal Teacher$_1$, T_2, T_n	Least hierarchical arrangement (only two levels). Most likely found in elementary schools.
2.	Principal Assistant Principal Teacher$_1$, T_2, T_3, T_n	Moderately Hierarchical (3 levels).
3.	Principal Dept. Chair.$_1$ Dept. Chair.$_2$ T_1 T_2 T_3 T_4 T_5 T_6 T_n	Moderately Hierarchical (3 levels). (More Specialties)
4.	Principal Asst. P. Asst. P. D.C.$_1$ D.C.$_2$ D.C.$_3$ D.C.$_4$ T_1 T_2 T_3 T_4 T_5 T_6 T_7 T_8 T_9 T_x T_y	Most Hierarchical (4 levels). Rarely found in Elementary Schools.

Figure 1.--Types of School Hierarchy.

TABLE 6.--Distr
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1	5
2	8
3	9
4	7
5	6

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TABLE 6.--Distribution and Mean Scores on School Hierarchy, by District.

District	Intermediate Levels in Hierarchy			Mean*	Rank
	0	1	2		
1	5	1	3	.78	1 (High)
2	8	1	3	.58	3
3	9	3	0	.25	5
4	7	1	3	.64	2
5	6	1	2	.56	4

*[2(# schools with 2 levels) + 1(# with 1 level) + 0] ÷ N schools in district].

is 1.67 while for elementary schools it is only .105. When means for each type of school in each district are calculated and ranked, none of the elementary school components of any district rank higher. One interesting effect of this separation before ranking is that secondary schools in districts 1, 2 and 4 have the same mean number of intermediary levels--all the differences appearing in Table 6 were due to hierarchical differences of elementary schools in those districts.

It appears that District 3 schools have more primitive hierarchy than schools in the other districts, while District 1 schools, in both elementary and secondary categories, showed the most complex hierarchical structure. However, the great intra-district variations in number of

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While the nature of district variations in hierarchical arrangements in schools cannot be uncovered from the above tables, these data do suggest that elementary and secondary teachers face different advancement opportunity structures within each school system. All but one secondary school in the sample offered at least one position between teacher and principal while only 4 of the 38 elementary schools had such a position that could permit intra-organizational career advancement for teachers. Although the differences between elementary and secondary schools in terms of hierarchy are huge, there are cases--where the connection between school level and hierarchy does not hold--most districts have at least one atypical case, a secondary school in category 0 or 1 or an elementary school in category 1 and these few cases may help us to separate the effects of school level from those of hierarchy within the school.

Hierarchy in the District Organization.--When the district school system itself is the focal point, the hierarchy variable is much more difficult to measure. When compared to schools, districts use less universal position titles for administrators below the superintendent level. The most common title, "assistant or "associate" superintendent is expected to denote an administrative area of

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control, rather than subject-matter specialization. "Administrative assistant" is another common position in the hierarchical network extending from superintendent to school principal. Each of the above positions may also supervise an aide or assistant-to position. Finally, most districts have divisional directors responsible for some type of district-level work or for coordination of school-level programs (e.g., personnel, financial or business directors).

Information about the existence of these positions was gathered from directories for the school districts obtained from the superintendents' offices. Position titles and occupants, clerical staffs connected to each position and any connection with federal, state or university programs were listed, allowing us to use reasonable criteria to distinguish staff from line positions. No survey data were used for this variable. Since assistant-to positions are not necessarily part of the main line of authority and since many divisional director positions appeared to function as staff specialists advising the superintendent and teachers, outside the main line of authority, the final hierarchy measure does not include these positions. Specialist positions and supervisors of course-work consultants were also eliminated from the hierarchy scale. These staff positions appear to be only peripherally related to the superintendent-principal line of control and are more likely to be seen by specialized

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Centralization of Decision-Making.--One characteristic of bureaucracies that researchers believe may affect worker behavior and perceptions of work is the extent of centralization of authority. In some research projects, however, the concept of centralization is either subsumed under the hierarchy dimension (such as Hall, 1969) or is subject to biased measurement, being based solely on perceptions of managers at upper organizational levels (such as Reiman, 1973). Each of these problems requires attention.

The first type of problem, the neglect of any independent measurement of centralization, stems from an assumption that any organization of a given configuration would have a decision-making pattern characteristic of that hierarchical structure. While this notion fits with Weber's analysis of the meaning of hierarchy, researchers have observed variations in the extent to which positions requiring ability of a given type have been entrusted with decisions appropriate to that position level and ability type (for instance, see Child, 1972). Thus it appears desirable to assess the decision-making structure of an organization empirically, rather than inferring it from the organization charts. At the same time, one must maintain the distinction between decision-making authority and personal influence or

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The second typical problem in research comes from an over-reliance by investigators upon the reports of individuals at one level of the organization. Thus, managers may feel that the decision-making structure is not centralized. Complicating the problem of reliance upon one level as a source of information is the problem of using a very small number of informants for data on any one organization, a practice which means that the reliability of the reports cannot be checked. Mansfield suggests that the most research on centralization suffers this weakness (1973). Yet lower-level respondents may not have realistic perceptions of the decision-making structure.

In an attempt to surmount the problems mentioned here, both conceptual and methodological, centralization is measured independently of hierarchical structure and a variety of sources of information about decision-making are tapped. For this study, objective limits and subjective perceptions of the decision-making structure are analyzed. Types of decisions often required in schools were listed in a survey of teachers and principals who were asked to choose the usual actual decision-maker from a list of ~~13~~ 12 positions. See Appendix A for a list of the decisions and positions. To simplify the analysis, the ~~13~~ 12 positions can be described as Teachers (acting individually or in

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concert), Principal (and appointees or assistants) and System Personnel (including superintendents, school boards and state officials). One category, parents, was dropped because no one believed parents played any regular role in decision-making.

The decisions listed in the survey have also been categorized, using estimations of the kind of competence required by each type (see Goslin, 1965; pp. 229-30), legal limits on certain decisions and also using respondents' opinions regarding the ideal decision-maker for each decision. The three resulting categories are decisions requiring teacher competency, decisions requiring principal (or local administrative) authority, and decisions requiring system level knowledge or authority.

The overall patterns of perception of teachers and principals of the levels at which the three decision categories were handled confirms my original separation of the fourteen decision areas according to the type of expertise or authority probably required to make each decision. As the data in Tables 7 and 8 suggest, both teachers and principals thought that system administrators were the most powerful of the three levels. Both groups also saw teachers making more decisions than principals in these areas, although the teachers perceived a somewhat greater advantage than did the principals.

TABLE 7.--Princ
of De

Locus of Competency	
Teacher (5 decisions)	
Principal (3 decisions)	
System (6 decisions)	
Net Authority	5

TABLE 8.--Teache
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Locus of Competency	
Teacher (5 decisions)	
Principal (3 decisions)	
System (6 decisions)	
Net Authority	

TABLE 7.--Principal Perceptions of Decision-Making by Locus of Decision Competency, for Fourteen Decisions.

Locus of Competency	Perceived Decision-Maker			
	Teacher	Principal	System	NA
Teacher (5 decisions)	158	48	45	14
Principal (3 decisions)	16	87	52	4
System (6 decisions)	35	64	205	14
Net Authority	209/742	199/742	302/742	32

53 principals x 14 decisions = 742 responses

TABLE 8.--Teacher Perceptions of Decision-Making by Locus of Decision Competency, for Fourteen Decisions.

Locus of Competency	Perceived Decision-Maker			
	Teacher	Principal	System	NA
Teacher (5 decisions)	3926	966	1208	920
Principal (3 decisions)	243	2120	1307	532
System (6 decisions)	1143	1391	4735	1155
Net Authority	5312/19656	4477/19656	7250/19656	2607

1404 teachers x 14 decisions = 19656 responses

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The centralization of authority within each school could only be measured from these subjective reports of teachers and principals. As might be expected, teachers did not always agree internally and teachers and principals often saw different decision-making structures within the same school. Rather than judging the correctness of one or the other source of information, I put two factors into the list of components of bureaucratization--principal perceptions of extent of centralization and teacher mean perceptions of centralization.

In giving each school one overall score for teacher perception of centralization, I calculated the number of teachers choosing each decision level for each decision in each school. If a choice of Teacher is called a Level 1 choice, a choice of Principal is called Level 2 and a choice of System is called Level 3 choice, the ideal decision-making pattern would be described as: $3 \geq 1$, $1 > 2$ but $(1+2) > 3$. Considering the distribution of choices in each school, a school will be labeled:

a. Highly centralized if $3 > (2+1)$. (26 schools)
b. Less centralized if $3 < (2+1)$. (27 schools)

These variables can then be fit into a picture of the overall bureaucratization of each school, using Child's point (adapted from Weber) that delegation of authority to the level whose positions involve adequate knowledge and authority to handle a given decision type is one of the hallmarks of bureaucracy (1974). Low centralization thus should be characteristic of more bureaucratic schools.

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District organizations can also be described as more or less centralized, using both net scores of principals and teachers in each district and also using formal provisions of wage and benefit contracts that specify the extent of delegation of authority for certain decisions.

While the contract provisions suggest only low levels of district differentiation on this dimension, principals and teachers see somewhat greater differences, possibly because they answered questions regarding a different set of decision areas than those covered in the contracts. When the contract provisions are considered, it is assumed that, in a natural state, all authority rests with officials of the school system (i.e., the board and superintendent, and that the collective bargaining process represents a formal acknowledgement of the delegation of certain types of authority and autonomy to teachers (and in a few cases, indirectly, to principals). Thus the number of provisions restricting system authority and the ratio of such restrictions to restrictions on teacher and principal autonomy can be used as an indication of the extent of decentralization of authority in the district organizations. (See Appendix E for the complete list of contract provisions limiting autonomy or authority.)

The remaining independent variables are much easier to conceptualize and measure than the hierarchy and centralization dimensions. Table 9 sets out the variable name, the source of the data used to measure the variable and, if

TABLE 9.--Independent Variables: Sources and Descriptions.

Variable	Source	Description
School Formalization	Principal Questionnaire	a. existence of rule book b. require course prep. for subs.
District Formalization	Contracts	Number provisions on

TABLE 9.--Independent Variables: Sources and Descriptions.

Variable	Source	Description
School Formalization	Principal Questionnaire	a. existence of rule book b. require course prep. for subs.
District Formalization	Contracts	Number provisions on authority, scale
School Universalism	Principal and Teacher Questionnaires	Criteria of promotion--loyalty?
District Universalism	Contracts	Provisions on seniority and merit
School Specialization of positions	Teacher Questionnaires	a. variety of courses taught b. number of grades taught
School Specialization of professions	Teacher Questionnaire	Number non-teaching specialists
District Specialization	District Handbooks	Size of non-admin. specialist staff
School Employee Expertise	Teacher and Principal Questionnaires	a. % teach outside major/minor b. % without BA; MA c. Principal education
School Standardization	Principal Questionnaire	a. official encouragement of standard exams b. % teachers using standard exams
SES--School	Michigan School Census	Mean score for each school

TABLE 9.--Continued.

Variable	Source	Description
SES--District	Michigan School Census	Mean score for each district
SES Homogeneity--School	School Census	Variance for each school
SES Homogeneity--District	School Census	Variance for each district

TABLE 9.--Continued.

Variable	Source	Description
SES--District	Michigan School Census	Mean score for each district
SES Homogeneity--School	School Census	Variance for each school
SES Homogeneity--District	School Census	Variance for each district
Student Ability--School	School Census	Mean net score for each school
Student Ability--District	School Census	Mean net score for each district
Student Homogeneity--School	School Census	Variance on net ability scores
Student Homogeneity--District	School Census	Variance on ability in each district

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Perceptions and Behavior

The intervening and dependent variables are composed of various aspects of teacher and principal perceptions, attitudes and behavior. Except for data on teacher and principal turnover rates in each school and district, which were gathered from district handbooks and district rosters of personnel, the intervening and dependent variables were operationally defined as responses or clusters of responses to questions on the teacher and principal surveys. The cluster analysis evaluated statistically the patterns of responses to each set of questions that were expected to tap one or another dimension of behavior or perception, to see if there was indeed great internal correlation between the elements of each theoretical cluster. This procedure will be described more thoroughly in the section on Statistical Analysis. The questions used to measure each variable and the content and reliability coefficient for each cluster obtained can be found in Appendix C and D. Table 10 displays the final list of intervening and dependent variables, the questionnaire or document from which data were drawn and a description of the character of the variable as it would be used for analysis (i.e., a rate, a cluster, a school mean, etc.).

TABLE 10.--Intervening and Dependent Variables: Teacher and Principal Perceptions and Behavior.

Variable Name	Form	Source: A. Teacher B. Principal
Remain in Job for: Extrinsic Reasons	*Cluster	A. Teacher Survey B. Principal Survey

TABLE 10.--Intervening and Dependent Variables: Teacher and Principal Perceptions and Behavior.

Variable Name	Form	Source: A. Teacher B. Principal
Remain in Job for:		
Extrinsic Reasons	*Cluster	A. Teacher Survey B. Principal Survey
Status Reasons	Cluster	A. Teacher Survey B. Principal Survey
Intrinsic/Idealistic	Cluster	A. Teacher Survey B. Principal Survey
Expect Cooperation and Support from:		
Outside School	Cluster	A. Teacher Survey B. Principal Survey
Inside School	Cluster	A. Teacher Survey B. Principal Survey
Exchange Ideas with:		
Outside Personnel	Cluster	A. Teacher Survey B. Principal Survey
Insiders	Cluster	A. Teacher Survey B. Principal Survey
Close Colleagues	Cluster	A. Teacher Survey B. Principal Survey
Outsiders Interfere	Cluster	A. Teacher Survey B. Principal Survey

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Problems Interfere	Cluster	A. Teacher Survey B. Principal Survey
Satisfaction with:		
Physical Job Characteristics		

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Problems Interfere	Cluster	A. Teacher Survey B. Principal Survey
Satisfaction with:		
Physical Job Characteristics Characteristics	Cluster	A. Teacher Survey B. Principal Survey (just one big cluster on satisfaction items)
Non-Physical Characteristics	Cluster	A. Teacher Survey
Authority Relations	Cluster	A. Teacher Survey
Events Occur:		
Poor Administration	Cluster	A. Teacher Survey B. Principal Survey (one cluster for this and next)
Principal Supports Faculty	Cluster	A. Teacher Survey
TO Hinders Teachers	Cluster	A. Teacher Survey B. Principal Survey
Own Influence Over Others	Cluster	A. Teacher Survey B. Principal (only influence outside school)
Concern for Good Opinion of:		
Insiders	Cluster	A. Teacher Survey B. Principal Survey
Outsiders	Cluster	A. Teacher Survey B. Principal Survey

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Anxious for New Teaching Job	Cluster	A. Teacher Survey
Anxious for Administrative Job	Cluster	A. Teacher Survey

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Anxious for New Teaching Job	Cluster	A. Teacher Survey
Anxious for Administrative Job	Cluster	A. Teacher Survey B. Principal Survey
Adequacy of Principal Authority	Cluster	A. Teacher Survey B. Principal Survey
Age	Individual	A. Teacher Survey B. Principal Survey
Sex	Individual	A. Teacher Survey B. Principal Survey
Degrees	Individual	A. Teacher Survey B. Principal Survey
Salary	Individual	A. Teacher Survey B. Principal Survey
Turnover	Rate	A. District Records--3 years B. District Records--3 years
Absenteeism	Individual	A. Teacher Survey
Leadership in TO	Cluster	A. Teacher Survey
Worker in TO	Cluster	A. Teacher Survey
Reading	Cluster	A. Teacher Survey

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Attend Conventions	Cluster	A. Teacher Survey B. Principal Survey
	Cluster	A. Teacher Survey

TABLE 10.--Continued.

Variable Name	Form	Source: A. Teacher B. Principal
Attend Conventions	Cluster	A. Teacher Survey B. Principal Survey
Take Courses	Cluster	A. Teacher Survey B. Principal Survey
Career Expectations	Cluster	A. Teacher Survey B. Principal Survey
Experience as Principal	Cluster	B. Principal Survey
Number and Age of Children	Individual	A. Teacher Survey B. Principal Survey

*For contents of clusters, see Appendix C and D.

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Statistical Methods

For many of the variables considered in this research project adequate measurement required two or more survey questions. While I assumed initially that each such set of questions would be unidimensional, it seemed necessary to consider the possibility that my assumption might be incorrect. Furthermore, even if my hypothesized sets of questions are each unidimensional, some technique for handling the multitude of related measures is required. To answer both of these problems, cluster analysis was performed on all the multi-measure survey questions used in this dissertation. The specific cluster analysis technique used was devised by Dr. John Hunter of Michigan State University. This technique permits one to see whether supposedly similar measures of a variable are actually similar in interaction with other variables and simplifies the further analysis of each group of similar measures of a variable.

Once the statistically derived clusters were established, I compared them to my original list of variables. With only minor changes, the original variables were almost perfectly reproduced in the statistically-derived clusters. Of these changes, differences between principals and teachers accounted for most cluster content differences. For instance, in principal clusters, other principals are "close colleagues" while for teachers, others in the same specialty are "close colleagues." The only unexpected

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statistical cluster was the overall "Job Satisfaction" cluster for principals. Principals did not differentiate idealistic, extrinsic and status categories of satisfying job aspects as I had expected they would and as teachers actually did. However, since (in Chapter II) I presented evidence regarding the general invalidity of job satisfaction as a variable, this divergence from expected clustering was not too disturbing. It simply gives an added reason for avoiding relying too heavily on satisfaction as a variable.

The reliability of each of these statistically confirmed and theoretically valid clusters is denoted by its alpha score in Appendix C or D. All principal clusters had reliability coefficients above .60 and most were above .70. Of the teacher clusters, only three had reliability coefficients below .60 and these were in the .57 to .59 range. Since these three were theoretically valid and seemed unidimensional and because of the large N for teachers (1403) these three clusters were kept as well.

The teacher clusters were then subjected to a non-parametric two-way analysis of variance, to assess the independent and interaction effects of school level and school district upon teacher perceptions and beliefs. This analysis used a nested design with an unequal number of schools in the cells, since the number of schools varies by level and district. The .05 level was used to decide

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To assess the effects of district and school level upon principal responses, I calculated means by district and by school level for each cluster and each behavior and used F tests to determine the significance of these structural variables.

The next step in the analysis of the teacher data is a multiple correlation matrix, attempting to identify the impact upon teacher behavior of each of the structural variables subsumed under district and level differences. The theoretical framework suggests that several organizational and occupational variables underly the overall district and level differences and that some of these may be more critical than others in influencing behavior patterns.

Because only five districts are studied, organizational variables presumably affecting principal behavior are harder to separate statistically. I used Spearman rank correlation coefficients to indicate approximately the importance of each of the district organizational variables upon principal perceptions and behavior. However, since so many structural variables differentiate the five districts, one cannot place too much reliance upon the results obtained here.

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CHAPTER IV

SCHOOL STRUCTURE: PATTERNS IN ORGANIZATIONAL AND AGGREGATE VARIABLES

Introduction

In this chapter, I will consider several theoretical problems concerning the structural variables that were brought up in the first and second chapters of this dissertation.

First, the rationale for treating elementary and secondary school structures as distinctively different will be tested by a comparison of actual patterns of organization at the two levels. If there are clearcut differences between the two levels on organizational dimensions, the next step is to see whether either level can be characterized as closer to the ideal bureaucratic type. In pursuing that question, it will be possible to see if the data provided in this sample present sufficient evidence to indicate that the bureaucratic elements are unidimensional.

Turning to the interaction of organizational and other school level variables, I will check whether any

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apparent patterns in organizational structure can be attributed to underlying variables (which will be inferred from differences in SES and staff composition). Finally, one must ask whether the aggregate school compositional variables are independent of the formal structural variables. If they are not, the organizational patterns must be controlled before the effects of compositional variables on attitudinal and behavioral variables can be assessed.

School Level Patterns in Bureaucratization

To check the possibility that elementary and secondary schools had distinctive patterns of organization, mean scores for each level on each organizational variable can be compared and evaluated. Table 11 sets out the means by level as well as the results of t-tests comparing the values for the two sets of schools.

It appears that secondary and elementary school structures are quite different, since secondary schools scored significantly higher in hierarchy, size of specialist staff, use of universalistic criteria and standardization than did elementary schools. But elementary schools had significantly higher scores on both teacher and principal perceptions of centralization and on specialization in major areas. For the other organizational variables, specialization in courses, expertise of teachers and formalization, secondary schools had higher scores, but the differences were not statistically significant.

TABLE 11.--Mea
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Organizational Variable	
Hierarchy	
Standardizatio	
Formalization	
Specialization- courses	
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Universalism[1]	
Expertise	
Centralization	
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TABLE 11.--Mean Scores on Organizational Variables, by Level of School.

Organizational Variable	School Level		value of t
	Elementary	Secondary	
Hierarchy	1.607	4.293	-6.07*
Standardization	2.333	3.351	-1.76**
Formalization	3.013	3.767	-1.26
Specialization--courses	2.485	3.241	-1.28
Specialization--major	3.660	2.464	2.65*
Universalism[1]	2.584	3.184	-1.90**
Expertise	2.729	3.421	-1.15
Centralization Pr.[1]	4.234	2.386	4.04*
Centralization T.	4.287	1.827	8.2*
Specialist Staff	2.162	4.499	-4.59*

[1]F tests were used to check the differences in variances of the two samples. Only universalism and centralization Pr. showed statistically significant evidence of differences in population variances, in 2-tailed tests with $\alpha = .10$, with elementary schools showing greater variance.

*Significant if (t) $\geq$ 1.96 for $\alpha = .05$ in a 2-tailed test with > 30 d.f.

**Significant for $\alpha = .10$ in a 2-tailed test with > 30 d.f.

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On the basis of the two clusters of bureaucratic variables described above, it appears that elementary and secondary schools do have different patterns of organization. More importantly, those differences suggest different approaches to bureaucratization, since each pattern contains some elements usually described as bureaucratic. The data do not suggest that either type of school is clearly more bureaucratic than the other. Furthermore the data confirm other recent research showing that bureaucracy is not unidimensional (see Hall, 1967; Pugh, et al., 1969; and Blau, et al., 1966).

Before proceeding to further analysis of the organizational structure of the sampled schools, it may be useful to consider whether the apparent differences in structure reflect differences in ecological or school level variables. To check this possibility, I compared elementary and secondary schools on several different dimensions. Mean values for these variables and calculated values of t are set forth in Table 12.

The data reported in Table 12 do not explain the large differences in organizational structure of elementary and secondary schools already observed. The only significant differences in the school level data concern the sex of the professional staff. Recalling conclusions from Census data noted in Chapter II, it is apparent that these reflect typical occupational differences, with a higher proportion of males both in teaching and in administration

TABLE 12.--Me

Variable[3]	
SES Level	
SES Homogeneit	
Student Abilit	
Student Homoge	
Consensus Teac	
Principal Sex	
Principal Expe ience	
% Female Teach	

[1]N = 3

[2]N = 1

[3]1 = L
Principal Sex,

*Significant i
with > 30 d.f

TABLE 12.--Means for Aggregate Data by Level of School.

Variable[3]	School Level		Value of t
	Elementary[1]	Secondary[2]	
SES Level	3.042	2.920	.20
SES Homogeneity	3.070	2.614	.75
Student Ability	2.887	2.584	.49
Student Homogeneity	3.162	2.499	1.12
Consensus Teacher	3.296	3.970	.95
Principal Sex	3.158	1.00	4.88*
Principal Experience	3.739	3.481	.49
% Female Teachers	4.461	3.264	3.11*

[1] N = 38.

[2] N = 15.

[3] 1 = Low, 5 = High for all variables except Principal Sex, where 1 = Male.

*Significant if (t) $\geq$ .196 for α =.05 in a 2-tailed test with > 30 d.f.

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at the secondary school level. Although it appears unlikely that these variables determine school structure, and although this could only be established by observation of the effects of personnel changes, I will return to the possibility that such a relationship exists in a later section, checking for patterns of organizational structure when sex of staff is controlled. One final observation that may be derived from Table 12 is that school district may be more closely related to such variables as SES, student ability and principal experience than is school level. This possibility will be considered later in a section on the bases and effects of school district variables.

Internal Patterns in Organizational Structure, by School Level

The next step in the analysis of organizational structure is to consider the interrelationships of the bureaucratic variables when school level is controlled.

Udy (1957) and Stinchcombe (1957) proposed that bureaucratization should be separated into two multidimensional components, rational and legal components of organization. I considered the pattern of internal correlation of elements and, although most correlations did not reach statistical significance, found some support for the separation of organizational items into two distinct groups. Table 13 presents the actual correlations among organizational variables.

TABLE 13.--Correlations Among Organizational Variables, by School Level.

Organizational Variables

TABLE 13.--Correlations Among Organizational Variables, by School Level.

	Organizational Variables								
	Legal			Rational					
	1	2	3	4	5	6	7	8	9
Legal									
1. Hier									
2. Standard	.14/-.39								
3. Formaliz	-.01/-.31	.32/ .27							
Rational									
4. Spec/Course	.03/ .32	-.07/-.30	.12/ .16						
5. Spec/Major	.12/ .35	.09/-.64	-.06/-.14	.05/ .41					
6. Universal.	.10/ .17	-.21/-.56	-.24/-.06	-.18/ .18	-.07/ .07				
7. Centr-Prin	-.12/-.44	-.02/ .69	-.01/ .38	.12/-.24	.08/-.34	.17/-.55			
8. Centr-Teach	-.10/-.55	.13/ .70	-.33/ .04	.02/-.08	.19/-.37	.19/-.38	.10/ .49		
9. Spec/Staff	0 / .11	-.07/-.32	.02/-.25	-.02/ .21	.09/ .29	-.18/ .05	-.46/-.22	-.21/-.12	
10. Expertise	.17/ .12	-.13/-.22	-.01/ .19	.14/ .18	.12/ .61	-.09/-.39	-.19/-.19	-.08/-.28	.42/ .25

Elementary/Secondary

Secondary schools: N = 15, rho is significant $\geq$ .73, α = .05.
Elementary schools: N = 38, rho is significant $\geq$ .31, α = .05.

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The anticipated intercorrelations within the two groups were neither as strongly nor as clearly demonstrated. I used the principles of cluster analysis (basing groups on correlations between each pair of items and parallel relationships of each item in a group with the items in other groups) to adapt the theoretical groups to empirical reality. The two groups thus separated were:

Group A: Hierarchy
Specialization by major or minor
Universalism
Specialization in courses taught
Expertise
Specialization of support staff
(weakly related to rest of group)

Group B: Standardization
Formalization
Centralization--Principal (weakly related)
in secondary schools only
Centralization--Teacher (weakly related)
in secondary schools only

Except for the inclusion of hierarchy in Group A, and centralization in Group B, these groups correspond to the theoretical separation of rational and bureaucratic modes of organization that Udy and Stinchcombe suggested. Thus any reliance on one overall summary measure of bureaucratization is likely to lead to confusing and contradictory results.

Since the internal correlations within the groups are not exceptionally strong, I will continue to consider the effects of each dimension separately, rather than considering the effects of rational versus bureaucratic groups as a whole. Furthermore, in Group B, the weak

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relationships between the two measures of centralization and both formalization and standardization should remind us that, even in Weber's idealized bureaucracy, authority was to be delegated to appropriate levels. Hence, it may be a mistake to consider centralization a bureaucratic element of organization--perhaps a third type, irrational, nonbureaucratic but authoritarian must be considered as well.

The next step in analysis is to consider the relationship of formal organizational structure to school compositional variables so that their eventual effects upon teachers and principals may be assessed. One might expect that school structure would be affected by resources available in the district. Since SES level is related both to tax level in the district and human resources in the community (such as education level of parents), I checked to see whether correlations among the organizational variables were stronger for schools with similar SES. Data presented in Table 14 offer some support for the idea that schools similar in SES share some similar organizational features and patterns.

Partialing out the effects of school SES produced no significant changes in the correlations at the elementary level. At the secondary level, however, it appears that SES had masked the strength of the positive correlations between hierarchy and three variables: specialization by subject, specialization in majors and minor area

TABLE 14.--Correlations Among Organizational Dimensions, by School Level, Controlled for [illegible]

TABLE 14.--Correlations Among Organizational Dimensions, by School Level, Controlled for Effects of SES.

	Hier.	Stand.	Formal.	Spec. Subj.	Spec. Major	Univers.	Expertise	Cent-P	Cent-T
Hier.									
Stand.	.13/-.48								
Formal.	0 / 0	.32/ .43							
Spec. Subject	-.03/ .54	-.07/-.28	.12/-.03						
Spec. Major	.10/ .51	.07/-.63	-.04/-.34	.03/ .38					
Univers.	.13/ .20	-.18/-.55	-.24/-.07	-.15/ .19	-.01/ .07				
Expertise	.15/ .38	-.16/-.19	.01/-.09	.12/ .07	.06/ .59	-.03/-.42			
Central-P	-.11/-.43	0 / .71	0 / .41	.13/-.28	.09/-.36	.16/-.54	-.17/-.25		
Central-T	-.07/-.59	.16/ .71	-.34/ .01	.04/-.09	.25/-.38	.12/-.37	-.02/-.32	.09/ .49	
Spec Stf	0 / .09	-.08/-.32	.03/-.26	-.03/ .24	.05/ .31	-.14/ .05	.39/ .30	-.45/-.22	-.17/-.13

Elementary/Secondary

N = 53 schools; 15 secondary, 38 elementary

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and expertise of teachers. Furthermore, hierarchy has a stronger negative correlation with standardization than had appeared when SES was not controlled, while standardization and formalization show a stronger positive correlation with SES effects partialed out. Since both expertise and specialization by subject now show weaker correlations with formalization and since specialization in major and minor areas now shows a stronger negative correlation with formalization, the evidence that two distinct organizational clusters exist appears quite a bit stronger now that the effects of SES have been separated from the direct organizational intercorrelations. One cluster appears to consist of hierarchy, universalism and all aspects of specialization and expertise, while the other is composed of centralization, formalization and standardization. Out of key with this interpretation is the fact that controlling SES also reduced the correlation between expertise and specialization by subject by .11. In every other case, however, the idea that two distinct clusters can be used to draw the broad outline of a school's structure received further confirmation from the purge of SES effects. One must ask, though, why no similar pattern is found at the elementary level.

One possible answer, which might also help to explain the generally different patterns of correlation observed at the two levels, is that the range of variation in students and in tasks is narrower at the elementary

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level than at the secondary, with not much overlap in values on some organizational characteristics. This is certainly true for hierarchy, teacher expertise and the two measures of centralization (see Table 11 for level means on these variables). If this is the problem, then future research on this question should discriminate more finely than the present data allowed me to do, so as to maximize the number of intervals of measurement of several organizational variables. However, it is also possible that research on school organizations alone cannot produce enough meaningful intervals on many variables and that the type of organization cannot be so narrowly defined if one is to get a realistic picture of organizational patterns.

It is also possible that part of the answer lies in the very different tasks and problems faced by secondary schools at different SES levels. All elementary schools must inculate basic skills--the traditional three r's, at least. However, some secondary schools must prepare students for college entrance, a situation which might encourage the hiring and evaluation of very expert and specialized teachers who can stimulate creativity and who can work with highly motivated students. Lower SES schools may face a different set of tasks: keeping students in school, improving basic skills and controlling antisocial behavior.

The next step in analysis is to consider the relationship of formal organizational structure to school compositional variables so that their overall effects upon teachers and principals can eventually be assessed.

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Interaction of Organizational and Compositional Variables

Measures of school composition included two teacher variables (percentage female and level of consensus), four student variables (SES, SES homogeneity, ability and ability homogeneity) and two principal variables (experience and sex). The correlations between these variables and the organizational variables appear in Table 15.

The most important contribution of these data is that none of the organizational-compositional relationships are statistically significant for secondary schools and very few are significant for elementary schools. Since the propositions being examined in this research do not predict any strong relationships, this observation is useful in reassuring us that any eventual effects of organizational structure cannot be attributed to hidden effects of school composition, since there are few consistent patterns between organization and aggregate compositional data for the schools. Perhaps the uniformity of state legal requirements minimizes the potential effects of differences in district composition. Turning to specific compositional variables, one sees that organizational patterns are only weakly related to percentage of female teachers and to sex of principal. Elementary principal experience is only weakly related to hierarchy, formalization and specialization B. Of these three, formalization is the strongest correlate of experience. Since female principals are usually more

TABLE 15.--Correlations Between Organizational and Compositional Variables, by Level of School.

	Compositional Variables					
	13	14	15	16	17	18

TABLE 15.--Correlations Between Organizational and Compositional Variables, by Level of School.

All Variables	Compositional Variables						
	12	13	14	15	16	17	18
2. Hier	.07/--	-.01/--	.29/-.06	.11/-.48	.10/ .08	-.16/-.12	-.06/ .05
3. Stand.	.16/--	.11/--	.18/-.22	.11/-.10	-.03/-.19	.12/-.25	-.01/-.12
4. Formal.	.16/--	.21/--	.33/-.27	-.05/ .64	-.23/ .07	.10/ .54	.19/ .16
5. Spec. Subs.	-.39/--	.17/--	-.04/ .07	.10/ .29	.08/-.02	.01/ .49	.11/ .38
6. Spec. Major	.04/--	-.08/--	.28/ .15	.23/ .20	.29/-.18	.17/ .33	.19/ .20
7. Univers.	.03/--	.03/--	-.13/ .05	-.21/ .01	-.09/ .25	-.27/ .28	-.21/-.07
8. Centr. P	-.21/--	.23/--	.16/-.45	-.06/ .11	-.25/-.08	-.10/ .01	-.06/ 0
9. Centr. T	.02/--	.13/--	-.12/ .04	-.21/ .05	-.02/-.31	-.07/-.15	-.41/-.27
10. Spec. Stf.	.25/--	-.35/--	-.18/ .48	.18/-.07	.49/-.24	.40/-.13	.33/-.26
11. Expertise	.03/--	.24/--	.05/ .07	.27/ .40	.57/-.25	.27/ .27	.49/ .16
12. % F Teach.							
13. Prin Sex*	.03/--						
14. Prin. Exper.	.24/--	.49/--					
15. SES Level	0 /--	-.14/--	.15/-.05				
16. SES Homog.	-.03/--	-.46/--	-.20/-.25	.53/ .19			
17. Stud. Ability	.35/--	-.31/--	.10/-.18	.67/ .84	.55/ .34		
18. Stud. Homog.	.03/--	-.40/--	-.03/-.30	.25/ .25	.38/ .60	.41/ .39	

Elementary/Secondary

N = 38 for elementary;
15 for secondary

*1 = M, 5 = F; all secondary principals male.

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experienced and since there is a weak correlation between principal sex and formalization, it is likely that experience alone is not critical to greater formalization, but rather greater experience of female principals. Male principals may use different administrative tactics as they gain experience.

Only size of specialist staff is positively related to secondary principal experience, suggesting that seasoned principals may be entrusted with larger schools offering more services and requiring greater administrative skill in the integration of this variety of services. Alternatively, assignment to more complex schools may be a reward for years of service in less prestigious, inadequately staffed schools. Principal experience at the secondary level was only weakly related to the other organizational variables, except that experienced secondary principals see themselves as part of a more decentralized authority structure than do elementary principals. This difference suggests to me that experience brings principals into closer agreement with teacher perceptions of the decision-making structure (see Tables 7 and 8, Chapter III).

When the student compositional patterns are considered, school level makes a great difference in the nature and strength of relationships. It is important to recall here that, on the whole, elementary schools scored at the extremes of the range for SES and ability and had great internal homogeneity, due to the location of elementary

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schools in distinctive neighborhoods in each district, while secondary schools had less extreme values and greater internal variance, since they often covered a multitude of distinctive neighborhoods. Bearing these facts in mind, let us turn to a consideration of the interactions of student composition and other variables.

At the elementary level, both types of student homogeneity were strongly related to teacher expertise and to size of specialist staff. Based on these correlations, one may infer that administrators are better able to diagnose difficulties and weaknesses in the more homogeneous schools and that a concentration of specialists and well-trained teachers in schools with clearly identifiable student problems might appear to be a wise use of limited personnel resources. Possibly the more heterogeneous schools, with a wider variety of student problems, are more likely to participate in visiting teacher programs of various sorts, although such data were not available for this study.

Although none of these correlations involving student compositional factors is statistically significant, the data do suggest some differences from the patterns uncovered at the elementary level. Summing up these differences, secondary schools showed a weak positive relationship between both formalization and teacher expertise and the compositional variable, student SES. Furthermore, SES homogeneity was weakly but inversely related to expertise and size of specialist staff while ability homogeneity was

inversely related to specialist staff as well, unlike the strong positive correlations found at the elementary level. While these relationships are not critical to the propositions at issue in this research, it is important to establish that the organizational patterns cannot be considered reflections of these inconsistent relationships of compositional and ecological variables. Furthermore, the weak and inconsistent relationships among organizational, staff and student variables suggest new areas for future research and confirm once again the apparent primacy of SES in predicting student ability levels. In Table 15, ability is also related, though not to a significant extent, to such rational elements of organization as specialization and teacher expertise, as well as formalization in secondary schools. SES is strongly related to each of the student variables but weakly or not at all related to the teacher and principal variables. Further research on the effects of bureaucratization upon student learning, independent of SES, might be a fruitful area of endeavor. Similarly, a longitudinal study of the ecological sources of school organizational change might help to assess the real importance of SES in explaining student ability.

When staff and student correlations are considered, it appears that sex of staff is somewhat relevant to student compositional patterns. Male principals are found in schools with less homogeneity and lower student ability and male teachers predominate in schools with lower student

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ability. These surprising correlations may simply reflect district officials' beliefs about appropriate places for male and female staff, rather than any causal link between sex and administrative or teaching ability.

Considering the whole range of data concerning compositional variables, very few of the correlations are statistically significant and yet a few interesting possibilities concerning the observed trends and contradictions in relationships have been detected. The strongest correlations link SES, ability, student homogeneity, teacher expertise and size of specialist staff. The only organizational features that seem to be determined by ecological patterns are the expertise and specialist staff variables, features that a district official clearly might link to student homogeneity of problems.

Conclusion

This chapter presented data testing the rationale for treating elementary and secondary schools as structurally different types. There were a few clearcut differences between the two school levels on organizational dimensions, however, neither level was significantly closer to the ideal bureaucratic type. In fact, the data presented here offer evidence for the treatment of bureaucracy as a multi-dimensional phenomenon.

Turning to the interaction or organizational and school aggregate variables, I found that the observed

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patterns of organizational structure could not, on the whole, be attributed to differences in SES and staff composition, although SES interrelated with some organizational patterns. Furthermore, the school compositional variables appeared to be largely independent of the formal structural variables, although there were some inconclusive trends relating principal experience to certain organizational variables in elementary schools and relating teacher expertise and size of specialist staff to the student aggregate variables. Further along in the analysis, when the effects of compositional variables upon dependent variables is assessed, the organizational variables most strongly associated with school composition will be controlled, to observe the independent effects of the compositional variables.

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CHAPTER V

VARIATIONS ON OCCUPATIONAL DIMENSIONS

Before analyzing the data concerning the main propositions, I must present evidence showing that there is variation in the independent variables and that the nature and patterning of such variation agrees with assumptions made in the first chapters. Basically, I must assess evidence pertinent to my treatment of teachers and principals as four occupational types and I must show whether or not all variation is accounted for by occupational and elementary-secondary school classification.

Occupational Differences

Data regarding differences in the four proposed occupations comes from individual and collective factors ascertained in the surveys or from organizational data. Broadly speaking, one must ask whether the members of the four occupations studied are different people (in terms of demographic factors), have different perceptions and attitudes and behaviors, and carry out different tasks, as their statuses in different organizational structures

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demand. Several tables will be presented to summarize data making these distinctions more explicit. Most evidence will pertain to the elementary-secondary distinctions within the categories of teacher and principal, since the latter broad categories are generally accepted as distinct occupational types.

Demographic

When personal characteristics are considered, the sample studied had clear sex differences between elementary and secondary teachers and principals. All of the secondary principals studied were male but less than half the elementary principals were male (42%). Among teachers, 54 percent of the secondary teachers were male, while 14 percent of the elementary teachers were male. When the range of variation among schools is considered, secondary schools range from 37 to 64 percent male, while elementary schools range from 0 to 47 percent male.

When the personal variable considered is age of respondent, other differences emerge. Almost half (47%) the secondary principals are under 45 years while less than a third (31%) of the elementary principals are under 45. This suggests two possible further distinctions between elementary and secondary principals: elementary principals should have more teaching and administrative experience, on the average and they should be more likely to retire from the labor-force from the position of principal. Secondary

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principals, younger and less experienced, seem to have a later career ceiling, either moving to system administration or moving out of education before retirement. A third possibility exists but cannot be handled in this study--it is possible that the personnel policies of the districts studied include a preference for young secondary principals and for older elementary principals but this may not be a universal pattern. Nevertheless, it appears that elementary and secondary principals may have different career patterns, in terms of timing of career ceiling, at least in the sample studied.

For teachers, the relationship between age and level is reversed: mean age of elementary teachers is 31, while for secondary teachers it is 33. This small difference does not meaningfully distinguish the two groups or suggest distinctive career patterns for each.

Other personal variables may help to further differentiate elementary and secondary levels. Table 16 allows one to compare the occupations in terms of professional training. Although all of the principals surveyed had completed Masters' degrees, there was a small difference by level in the percentage with Ed. Spec. degrees as well, with secondary principals slightly ahead of elementary principals. For teachers, the range of differences among schools, as well as the means for each level, may be helpful. While almost twice as many elementary teachers lacked Masters' degrees, compared to secondary teachers, some

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elementary schools had a greater proportion of MA teachers than did some secondary schools. Thus it appears that educational level and occupation are related but that one should not make inferences concerning the quality of staff in any given school based simply upon these gross occupational differences. Educational level of teachers and principals does not appear to be such a critical variable in differentiating elementary and secondary occupations as it may have been at one time (see Lieberman, 1956).

Another characteristic that earlier research has suggested as a discriminant between elementary and secondary teaching levels is the continuity of work experience (Hansen and Gerstl, 1967). Elementary teachers should move in and out of the labor force, just as most women workers supposedly behave. While the survey did not include questions on continuity of experience, years of professional experience were established for both principals and teachers and are reported in Table 17.

Comparing mean experience for the two groups of teachers, only small differences appear. Since elementary school teachers' average age is two years lower, one would expect about two years less mean experience. Surprisingly, it appears that elementary school teachers began teaching before their twentieth birthday! Even allowing for vanity and misinterpretation of the question, the data suggest that both groups of teachers experienced continuous employment as teachers since finishing college, contradicting

TABLE 16.--P
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TABLE 16.--Principals' and Teachers' Education, by School Level.

	Elementary	Secondary	Total N
Principal			
Less than MA	0	0	
MA but less than Ed. Spec.	87.0%	80.0%	53
Teachers			
Less than MA	90.0%	48.0%	1404

TABLE 17.--Mean Professional Experience of Principals and Teachers, by Level.

	Elementary	Secondary	Total N
Principal			
Years Teaching	18.3	16.4	52*
Years Principal	10.1	6.5	52*,**
Teachers			
Years Teaching	11.4	12.4	1404

*1 case NA.

**F significant at $\alpha \leq .09$ for 2-tailed test.

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previous research concerning the labor-market behavior of elementary school teachers (such as Lortie, 1969). This finding is especially interesting since the survey was completed before the current over-supply of teachers became a problem. In 1968, teachers were not faced with the poor labor market conditions of the 1970s. So it is improbable that fear of difficult re-entry into the market is responsible for the continuity of elementary teacher employment.

Returning to Table 17 to consider principals' professional experience, the data here confirm the possibilities raised in the section on age differences. As expected, elementary principals had higher mean experience in teaching than did secondary principals. To check whether greater teaching experience is clearly an occupational discriminant, one must consider the possible effects of sex of principal. Perhaps female candidates for the position of principal must have or, for some reason, usually do have more years of teaching experience than male candidates. To check that possibility, I compared the work backgrounds of males and females at the elementary level only and found that 18 of the 21 female principals had 11 or more years of teaching experience, while only 4 of the 17 male principals had such extensive teaching backgrounds. Thus it appears that sex best predicts timing of the move from teaching positions to administrative positions. Sex does not appear to affect length of tenure at the level of principals, however--10 of the 17 male elementary principals

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had more than 5 years of experience as principal while 12 of the 21 females were in the same category. Evidently, then, the differences between administrative experiences of elementary and secondary principals, with the logical implications of later career ceilings for those at the secondary level, are real effects and are not attributable to sex of principal.

Since secondary principals are younger, have less teaching experience and significantly less administrative experience, one might ask what happens to these principals as they gain administrative experience. As I suggested earlier, it is possible that experience administering a large, complex school with more vocal clients is considered by district authorities more valuable career preparation than comparable years at the elementary administrative level. If prospective career ceilings are higher for secondary principals, this is an important occupational difference.

In summary, it appears that demographic differences between elementary and secondary personnel are weak except for sex of worker. Particularly, the usually described differences between elementary and secondary teachers do not appear to be very strong in this study, with the exception of sex and educational background (and probably curricular content). There were only minor differences between the two groups of teachers on age and year of professional experience.

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When the demographic data on principals is summed up, the most obvious difference also concerns sex of worker--all secondary principals were male. Furthermore, secondary principals are somewhat younger, slightly more educated and report fewer years of teaching and administrative experience. Sex appeared to be a critical variable in explaining the timing of the move from elementary teaching to elementary administration but school level appears to be more important than sex in predicting tenure at the level of principal.

Perceptions and Self-Definitions

Power Relations and Autonomy.--As the earlier chapters detailed, studies of professionals' adaptation to formal organization frequently cite the difficulty of maintaining autonomy in such settings as a major factor underlying hostility of professionals to bureaucratic settings. Thus it is vital to consider the importance of power relations and professional autonomy in explaining variations in behavior at work.

The propositions laid out in Chapter II posited that principals would exercise more power and have more autonomy than teachers and that secondary personnel would be more powerful and autonomous than elementary personnel. The traditional expectation, however, would be that workers in less bureaucratized settings would exercise more power and be more autonomous. Meaningful resolution of these

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conflicting ideas requires data like that presented in Table 18, which contains mean responses of each occupational group to questions concerning these issues (see Appendix A and B for specific questions from survey). There were statistically significant differences between elementary and secondary personnel on each set of items. In each case, the secondary personnel reported a more decentralized authority structure than did elementary staff.

Table 18 shows that secondary principals and teachers reported that the decision-making structure allowed principals and teachers to make many professional decisions, while elementary personnel perceived a much more centralized authority structure, with professional decisions made at the district level. Furthermore, secondary principals exercised greater power over other principals, district officials and school boards than did elementary principals. The same pattern was found for teachers, with secondary teachers exercising greater personal influence in all their work-based relationships. Finally, secondary principals agreed much more strongly than elementary principals with statements that their authority was adequate to handle a variety of in-school problems. Teachers' perceptions of principal authority corroborated those beliefs.

The data on decision-making patterns and personal power confirms the original propositions that secondary personnel would report having more power and more autonomy than elementary personnel. The evidence concerning

TABLE 18.--Perceptions of Power Relations, by Occupation.

	Elementary	Secondary
Principals:		
Typical Decision-		

TABLE 18.--Perceptions of Power Relations, by Occupation.

	Elementary		Secondary	
Principals:				
Typical Decision-Making Level	4.23	>	2.39*	(1 = Teacher, 3 = Principal, 5 = District Auth.)
Adequacy of Own Authority	3.61	<	4.33*	(1 = Low)
Own Power Outside School Building	1.52	<	1.78*	N = 52
Teachers:				
Typical Decision-Making Level	4.29	>	1.83*,**	
Adequacy of Principal Authority	4.13	<	4.33*	
Own Power Over Others at Work	1.64	<	1.81*	N = 1404

*Different at $\alpha \leq .05$ for two-tailed F test.

**Means based on mean teacher scores for 14 decision areas.

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teacher-principal differences is less clear, however. Although teachers reported slightly more personal power than their principals, the elementary-secondary differences are considerably stronger than the principal-teacher differences. Furthermore, the score for teachers included references to their relationships with several people within their building--other teachers, assistants and department heads--while the score for principals refers only to their interaction with other principals, the school board and the superintendent. Since the district officials are the source of most of the principals' authority, it would be surprising if principals all felt powerful vis-a-vis that group. In fact, the most we can infer from this data is that principals do not report more power or autonomy than do teachers.

Employee Relations.--Turning to another factor possibly influencing the behavior of teachers and principals, it is important to assess the character of the relationship between worker and supervisor and between worker and other groups making demands on the organization. Several clusters of variables measured these relationships: administration poor, principal supports teachers, teacher organization hinders, cooperation expected of outsiders and cooperation expected inside school. The original propositions suggested that schools with more hierarchical levels, greater specialization, formalization, standardization and reliance on universalistic criteria would be characterized by better

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supervisor-worker relations because the more clearly defined work roles and the lack of particularism would reduce the likelihood of conflict. Occupational differences should be apparent as well, since workers with greater power and autonomy (in this case, secondary personnel) should report less strain in the authority relations. Since secondary schools fit the organizational requirements and secondary personnel fit the autonomy requirements, I expected that secondary personnel would report more cooperation and smoother relations with school and district administration than elementary personnel. Table 19 presents the results of analysis of variance for the effects of school level on responses concerning these variables.

Surprisingly, four of the five means indicate that the elementary teachers perceive their environments as more cooperative and supportive than do secondary teachers, even though the latter report more autonomy, more influence and clearer, though more complex, organizational settings. In explaining this unexpected reversal, one might propose that, in order to accomplish their jobs, elementary personnel must develop channels of cooperation with others because of their individual lack of autonomy and power. The more autonomous secondary teachers may be forced to bargain, rather than cooperate freely, because of a more delicate balance of power and autonomy in secondary schools. Also, since elementary principals are considered to have little authority, it may be more difficult for teachers to blame

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TABLE 19.--Mean Reported Cooperation and Support, by Occupation and School Level.

	Elementary		Secondary	Significance Level*
Principals:				
Coop. Parents	4.03	>	3.67	.09
Coop. District	3.68	<	3.83	>.10
Coop. In School	4.92	>	4.73	>.10
Poor Administration (District Level)	1.84	<	1.99	>.10
TO Hinders Teachers	1.69	>	1.51	>.10
Teachers:				
Coop. Outsiders	4.14	>	3.99	.0002
Coop. Insiders	2.99	>	2.65	.0001
Poor Administration (at School Level)	2.27	<	2.53	.0001
Prin. Supports T.	3.58	>	3.13	.0001
TO Hinders Teachers	1.90	<	1.99	>.10

*Significance in F test with N = 52 principals, 1404 teachers.

See Appendix C and D for contents of clusters and exact wording of questions.

problems on these principals than for secondary teachers to fault their more independent, more powerful principals. Since teachers were not asked to evaluate the performance of district officials, it is impossible to see whether elementary teachers might be more critical of the administrators they see as most powerful.

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When principals' perceptions are considered, school level makes a statistically significant difference only for cooperation expected of parents, which is higher for elementary than secondary principals. Since this difference may be attributable to size of school, age of students and other non-structural variables, it is not critical to the propositions. Turning to the other variables, none of which resulted in statistically significant differences, it is interesting to note that the elementary principals expect more cooperation within school, from teachers and assistants, than do secondary principals. This parallels the responses of teachers and suggests that cooperation may be more likely when principals and teachers are equally powerless. Since secondary principals expect somewhat more cooperation from district officials but also have more criticism of these officials it is difficult to suggest any alternative explanation of elementary-secondary principal differences on the basis of this data. It is possible, however, that the organizations whose attributes are critical to the principal-superintendent relationship are the school district organizations, not the schools. This possibility will be considered in detail in Chapter VII.

The most important individual variable in the original propositions, the importance of work to self, can only be considered indirectly in this analysis, since no specific questions in the original survey explicitly handled this variable. The best available approximation on this

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variable comes from questions about why one remains in an occupation, whether one would re-enter the occupation and the importance of various possible reference groups. The propositions in Chapter II suggested that secondary personnel should have mainly intrinsic reasons for remaining in education, since work should be more important to those whose jobs require specialized training and offer a more knowledgeable audience. Furthermore, secondary personnel should be more willing to re-enter education than elementary staff. Finally, principals should score higher than teachers on most items because of their greater autonomy, prestige and better chance to demonstrate ability to professional audiences. Table 20 presents the data on these propositions, while a consideration of reference group differences is taken up in Table 21.

Table 20 shows that intrinsic aspects of work were the most important reasons why elementary and secondary teachers remained in their jobs, while one component of the intrinsic cluster, idealism about students, was most important for both groups of principals, followed by the intellectual aspect of the intrinsic cluster. There was no significant difference in the means by school level for this variable, although elementary personnel had slightly higher means on this variable, as on each variable in this table. It appears that work is important to most of the respondents, if the rationale already presented for using this item as an approximation of overall importance of

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TABLE 20.--Importance of Work, by Occupation.

	Elementary		Secondary	Significance Level*
Principals:				
Importance Extrinsic	3.50		3.43	>.10
Importance Status	3.69		3.42	>.10
Importance Students	4.43		3.97	>.10
Importance Intellect	3.81		3.57	>.10
Re-enter Education	4.37		4.00	
Teachers:				
Importance Extrinsic	3.28	>	3.17	>.10
Importance Status	3.44	>	3.21	.0001
Importance Intrinsic	3.67		3.58	>.10
Re-enter Education	4.11	>	3.76	.0001

*Significance of F-test, 2-tailed, with N = 52 principals, N = 1404 teachers.

of work to self is justified. However, since elementary teachers' means on extrinsic and status reasons for remaining are significantly higher than secondary teachers' means on those items, it is possible that the intrinsic aspects play a larger part in the secondary teachers' view than in the elementary teachers' view, which would support the proposition in question.

Against that interpretation of the data on important aspects of work is the data regarding willingness to re-enter education. Although I expected secondary teachers and principals to express greater eagerness, the reverse was true for both principals and teachers and at a

significant level for the latter. Since elementary staff's emphasis on intrinsic motivation was not significantly different than secondary staff means, perhaps greater importance of status and extrinsic rewards of their jobs plus their equal interest in intrinsic rewards combine to produce greater overall willingness to re-enter education. Although the data do not permit us to examine the effects of expectations versus reality upon willingness to re-enter, one might speculate that elementary teachers expected less status and external rewards than secondary teachers and that the expressed importance of these variables reflects their pleasure with net (Expected-Actual).

The patterns for principals are similar to those for teachers, except that none of the elementary-secondary principal differences are statistically significant. Once again, the elementary personnel expressed greater willingness to re-enter education than did the secondary personnel. In this case, one might make some fairly justifiable inferences regarding expectations. Especially since many elementary principals were female, one might suppose that, to elementary principals, their current position represents great career success. As the demographic data showed, these are older people with many more years of professional experience, many facing retirement. The secondary principals, being younger and all male, may see their jobs as steppingstones to higher career points and may be more aware of alternative occupational choices that

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might have been equally rewarding. But to the elementary principals, especially to the older females, their current career success may be attributed by them to the choice of education as their occupation.

When principals are compared to teachers, the data support the prediction that principals would be more willing to return to education than teachers and would cite the importance of intrinsic reasons more strongly than teachers. In fact, principals answered more positively than teachers in each category but the strongest differences were in the teacher and principal means for intrinsic (including student and intellectual) reasons for remaining at work.

The data on reasons for remaining at work and willingness to re-enter education offer, at best, weak support for the proposition that secondary personnel find work more important to self than do elementary and somewhat stronger evidence that principals are more involved in their work than teachers. According to these propositions, similar relationships should hold for use of professional reference groups.

I expected that elementary and secondary personnel could be distinguished by their use of close colleagues, rather than administrators or staff outside their own area as an important reference group. Two sets of questions will be considered in identifying reference groups: the extent of idea exchange with several different groups of people and the importance to the respondent of the good

opinion of various groups or individuals. Table 21 sets out the means for principals and teachers, by school level and the results of one-way analysis of variance where school level is the independent variable.

My expectations regarding important reference groups were borne out in the data displayed in Table 21. Only secondary teachers reported that the opinion of teachers in their specialty was most important (of the three opinion sources) and their rating of the importance of colleague opinion was significantly higher than the ratings by elementary teachers. The latter were most concerned about the opinions of superiors and this group was of significantly more concern to them than to secondary teachers. Furthermore, elementary teachers considered the opinions of friends just as important as that of teachers in their specialty, unlike secondary teachers.

While these facts suggest a greater awareness of an expert professional audience at the secondary level, the evidence regarding actual exchange networks seems a puzzling contradiction to the elementary teachers' relative unconcern about colleague opinion. As Table 21 illustrates, elementary and secondary teachers had similar perceptions of the extent of information exchange within their schools but elementary teachers reported more exchange of ideas with specialist colleagues, as well as with non-school personnel. This reversal of expectations suggests two possibilities to me. Since out-school exchanges (share ideas with

TABLE 21.--Mean Importance and Idea Exchange with Other Personnel, by Occupation and School Level.

TABLE 21.--Mean Importance and Idea Exchange with Other Personnel, by Occupation and School Level.

	Elementary		Secondary	Significance Level* α =
Principals:				
Exchange Outside School	2.45		2.44	>.10
Exchange in School	2.70	<	3.33	.03
Exchange Close Colleague	3.78		4.00	>.10
Importance Close Coll.**	3.79		3.99	>.10
Importance Superiors	3.38		3.23	>.10
Teachers:				
Exchange Outside School	3.68	>	3.57	.003
Exchange Inside School	1.36		1.35	>.10
Exchange Close Colleagues	2.92	>	2.63	.0001
Importance Close Coll.**	3.20	<	3.39	.001
Importance Superiors	3.35	>	3.14	.0001
Importance Friends	3.20	>	3.09	.03

*Significance for 2-tailed F-test with N = 52 principals, N = 1404 teachers.

**Close colleagues means "in school" for principals, "in specialty" for teachers.

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parents, friends and district officials) represent less professional idea sources but exchanges with close colleagues suggest a strong professional orientation as well, perhaps elementary teachers simply talk about their work more with everyone and have more opportunity to talk to everyone, given the smaller size of staff. Since their clients are very young, perhaps considered incapable of relaying accurate information to parents and since these children are put into programs rather than allowed to select classes, elementary teachers may be forced to confer more frequently with parents and other close teachers and may need parental cooperation in order to carry out their tasks of socializing incompetent clients. At the secondary level, where students sign up for classes and are acknowledged as semi-rational, almost fully socialized individuals, such comprehensive efforts on the part of teachers are not necessary. Data on the topics usually covered in idea-exchange might illuminate this problem. If elementary teachers continually search for ideas about how to work with specific children or handle their parents, these problems would require solution every year, as each teacher meets a new group of students. If secondary teachers consult on less socio-emotional problems, the need for continual interaction with colleagues might be less, the observed differences between elementary and secondary exchange networks would be understandable, and the reference group identification would not be problematic.

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Lacking this kind of data, we can only say that secondary teachers are more concerned with the good opinion of close colleagues and that elementary teachers have stronger exchange networks with close colleagues. Perhaps the real answer is that secondary teachers are unwilling to solicit ideas from the people whose opinions are most important to them (see Blau's suggestion that consultation with a colleague shows deference to that colleague, 1955).

When the principal data are considered, only one variable shows statistically significant differences: secondary principals report more idea exchange with their teachers and assistants than do elementary principals, who appeared to engage in fewer exchanges of any type. Supporting further, though not at a significant level, the idea that secondary principals have a stronger professional orientation than elementary principals are the level differences in importance of superiors and colleagues. Secondary principals are more concerned about the opinions of close colleagues and less about the opinions of superiors than are elementary principals.

On the whole, there seem to be somewhat stronger reliance on professional, rather than organizational or non-work reference groups among secondary personnel than among elementary, confirming the original propositions.

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Job Satisfaction.--Turning to another variable that has been assigned an important role in most research on worker behavior, variations in job satisfaction levels will be considered, so that one of the main alternatives to my propositions about worker behavior can be compared to mine on the basis of explanatory power. Table 22 presents the mean scores for the four occupational types on satisfaction with work. For contents of each cluster, see Appendix C and D; for specific questions on the survey, see Appendix A and B.

TABLE 22.--Job Satisfaction by Occupation.

	Elementary		Secondary	Significance Level*
Principals:				
General satisfaction	3.94		3.81	>.10
Teachers:				
Satisfaction Physical	3.54	>	3.22	.0001
Satisfaction Non-Physical	3.16	>	3.08	.02
Satisfaction Superiors	3.96	>	3.83	.0002

*Significance of F-test, 2-tailed, with N = 52 principals, N = 1404 teachers.

The data summed up in Table 22 show that elementary personnel expressed higher levels of satisfaction than secondary personnel for all categories of satisfaction, although the principal differences are not statistically significant. Since a score of 3.00 means "somewhat satisfied," it appears that no major areas of dissatisfaction were isolated for either level. Both sets of teachers found greatest satisfaction in relations with superiors and least in the non-physical aspects of their work. Comparing principals and teachers, it is likely that a single summary score for teachers would be lower than the very high principal scores on general satisfaction but both groups reported the more than moderate satisfaction with their jobs that countless studies have led us to expect (Department of Labor, 1973).

In summing up the occupational differences in perceptions of work situations and definitions of self, there seem to be very great differences between elementary and secondary teachers and between teachers and principals. Level of school exerts fairly small effects on principal variables, except in the areas of power and autonomy.

On the whole, compared to elementary personnel, secondary personnel appear to feel more powerful, more autonomous, and more concerned with poor administrative practices; to get less cooperation from parents, superiors and colleagues; to be more concerned about the opinions of close colleagues but less concerned about superiors' and

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friends' opinions; to be somewhat less satisfied with work conditions, less willing to re-enter education and, finally, to be less enthusiastic about any of the reasons for remaining in their jobs. Since the demographic differences between elementary and secondary personnel may influence these variables, further analysis of the effects of the independent variables will control for the sex of respondent, which is the clearest demographic variable related to occupation.

When teachers and principals are compared, principals report greater willingness to re-enter education, greater importance for each type of reason for remaining in education, more emphasis on professional reference groups, stronger collegial exchange networks, less awareness of union or administrative impediments to job performance, greater expectations of cooperation within the school but less outside the schools, greater autonomy and authority but slightly less personal influence over others at work than did teachers at the same level.

The next step in analysis is to see whether there are occupational differences in behavior, as the documented differences in demographic and especially in perceptual and self-definitional variables suggest.

Behavioral Differences by Occupation

In this section I will examine overall occupational differences in the behavioral dependent variables. This

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preliminary step allows the eventual comparison of the importance of specific occupational variables (such as demographic or perceptual) with organizational factors as possible determinants of behavior at work. Absenteeism, job turnover rates and several behaviors typically related to dedication of professional workers will be considered in this section. The propositions suggest that principals should be more dedicated to work than are teachers and that secondary personnel should be more dedicated than elementary personnel. Table 23 presents data concerning these propositions.

The data presented in Table 23 suggest four overall trends. Elementary and secondary principals are not significantly different in their behavior; secondary teachers report significantly more evidence of dedication than do elementary teachers; secondary personnel in general, have higher mean scores on dedication variables than do elementary staff; and, finally, for the items where comparable data is available, principals generally exhibit more dedicated behavior than do teachers.

Considering first the principal data, there is no statistically significant evidence that secondary principals surpass elementary in dedication. However, the data do not refute that possibility, since the mean scores for principals suggest that the trend is in the predicted direction. Since elementary principals reported lower hopes of moving up the administrative hierarchy in any

TABLE 23.--Mean Behavioral Evidence of Dedication, by Occupation.

	Elementary	Secondary	Significance Level*
Principals:			
Attend Conferences			

TABLE 23.--Mean Behavioral Evidence of Dedication, by Occupation.

	Elementary		Secondary	Significance Level*
Principals:				
Attend Conferences	3.76	<	4.13	>.10
Turnover Rate*,**	26.5 %	>	13.3 %	ns (X Sq.)
Union Activity	2.91	<	3.00	>.10
Career Hopes	1.69	<	1.72	>.10
Career Expectation: Up	15.8 %	<	26.6 %	ns (X Sq.)
Career Expect.: Leave Ed.	28.9 %	>	13.3 %	ns (X Sq.)
Teachers:				
No. Books/month	4.19	<	5.14	.02
No. Journals/month	1.53	=	1.53	>.10
Time reading/month	3.80	<	4.14	.02
Attend Conferences	4.74	>	3.77	.02
Days Absent/year	4.38	>	3.05	.02
Turnover Rate**	30.2	>	21.5	
Take Courses in Specialty	2.89	<	2.99	>.10
Only Required Courses	2.47	>	2.06	.02
Union: Member	4.48	<	4.51	>.10
State Committee	1.17	<	1.34	.01
Local Committee	2.06	<	2.49	.01
Building Repres.	2.61	>	2.40	.01
Local Officer	1.75	<	2.04	.01
State Officer	1.02	<	1.17	.01
State Program	1.96	<	2.30	.01
No. Other TOs Member	1.37	<	1.42	.05
Career Hopes: Admin.	1.38	<	1.51	.03
Better School	1.89	<	1.96	.08

*Significance of 2-tailed F for N = 52 principals, N = 1404 teachers.

**2-year contracts for principals; 3-year turnover rates.

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Looking at the teacher data, statistically significant effects of teaching level are plentiful. Although elementary teachers attend more conventions and conferences and read as many specialist journals as do secondary teachers, every other indicator of dedication shows higher scores for secondary teachers. Elementary teachers read fewer work-related, non-course books, spend less time reading for work, take fewer courses, not required by their contracts, are absent more often, have lower career hopes and higher turnover rates than secondary teachers. Furthermore, elementary teachers do not simply channel their energy into union activities. While both groups of teachers are members of unions, elementary teachers score higher than secondary only on history as building representative, which reflects not dedication to work but the much smaller pool of candidates for the job in the elementary schools. (Secondary schools average four or five times the number of faculty members.)

For all other indicators of union activity, secondary teachers scored significantly higher than elementary teachers. Whether the same teachers are exhibiting both professional and unionist dedication will be considered later in correlation analysis of the dependent variables.

Summarizing the teacher data, secondary teachers exhibit considerably more dedication to work than do elementary teachers. The only contradictory case is that of attending conferences, for which the elementary mean was significantly higher than the secondary. This activity does not appear to be such clear evidence of pure dedication to work as, for instance, time reading, so the contradictory evidence in this dimension cannot be considered a strong refutation of the propositions. A case could be made that going to conferences and conventions represents an escape from the job rather than an attempt to enhance job performance. In the next chapter, correlational evidence will be presented to further determine the relationship of conference-going to the other variables representing dedication to work.

Finally, comparison of the few equivalent items for principals and teachers offers some support for the proposition that principals are more dedicated than teachers. Unfortunately, there is no way to compare the most critical elements--reading and absenteeism--although the ease of substitutability for teachers suggests that their rate of absenteeism would be considerably higher. Table 23 shows, though, that principals are more likely to plan hierarchical career movement than are teachers, have lower turnover rates (not a clearcut evidence of dedication on its own) and are somewhat more likely to report being active in their professional unions (using teacher responses about local committees and local officers as indicators of

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low-level activity). Once again, the smaller numer of principals in a district may require greater activity from them than is required of most teachers.

Before proceeding to an examination of intra-occupational differences in self-investment and dedication to work, it is important to evaluate the current status of my general proposition that self-investment level determines the level of dedication to work displayed by an individual. Table 24 presents overall conclusions drawn from the evidence regarding occupational differences in the two major indicators of self-investment and summary occupational differences in dedication (these are taken from Tables 20 and 21). Support for my proposition would require that the occupations highest in level of self-investment also have higher means for indicators of dedication to work.

The summary information in Table 24 shows that the only statistically significant inter-occupational patterns relating mean self-investment level and dedication to work support the proposition that these are positively related. Unfortunately, the correlational data do not permit one to test the notion of causation at all, only the strength and sign of a static relationship. Within these limits, it is encouraging to note that principals exhibit both greater self-investment and greater dedication than teachers. While none of the occupational level differences in importance of intrinsic aspects of work is statistically significant, it is somewhat surprising that the observed

TABLE 24.--Summary of Occupational Differences in Level of Self-Investment and Dedication.

Occupation; Level	Self-Investment: Intrinsic Importance	Reference: Close Colleagues	Dedication

TABLE 24.--Summary of Occupational Differences in Level of Self-Investment and Dedication.

Occupation; Level	Self-Investment: Intrinsic Importance	Reference: Close Colleagues	Dedication
Principals	High[1]	High[1]	High[1]
Elementary	High	Low	Low
Secondary	Low	High	High
Teachers	Low[1]	Low[1]	Low[1]
Elementary	High	Low[1]	Low[1]
Secondary	Low	High[1]	High[1]

[1]These differences are statistically significant--see Tables 20 and 21.

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patterns on this dimension of self-investment are different from the significant patterns on the other dimension of self-investment, importance of close colleagues as reference group. Using only the latter, significant data concerning self-investment, secondary personnel do exhibit greater self-investment and greater dedication to work, supporting the proposition.

In summary, the data presented in this section largely confirm the propositions that secondary personnel are more dedicated than elementary and that principals are more dedicated than teachers, although the lack of comparability of some data weakens these conclusions. Since these occupational variables and situations are critical in predicting behavior, further analysis of the effects of school and district organization will be carried out separately for each occupational type.

Conclusion

In this chapter, I have presented evidence that elementary and secondary principals and teachers are distinctive in demographic characteristics, perceptions of work situations and behavior. The next chapter will consider the effects of organizational variables within each occupational type, to answer the question whether occupational type subsumes most of the variation in organizational structure and, if not, whether organizational structure has similar effects for across occupational types.

CHAPTER VI

FACTORS INFLUENCING INTRA-OCCUPATIONAL DIFFERENCES IN PERCEPTIONS AND BEHAVIOR OF TEACHERS

Introduction

This chapter will address the propositions that certain school organizational variables influence perceptions, behavior and, less critical, attitudes of teachers in the school. The preceding two chapters have established some evidence supporting my predictions that occupation helps predict teacher and principal perceptions and behavior, and that the elementary-secondary occupational distinction is strongly related to several school organizational variables. From these two sets of findings, one can see that it is important to maintain the elementary-secondary distinction in this chapter, in order to separate occupational from organizational influences. At the same time, controlling for occupational level will greatly reduce the range of organizational variation whose influence is to be measured in this chapter.

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This approach, then, provides a very stringent test of the propositions at issue. We have already observed that secondary schools are significantly more hierarchical, less centralized and have larger support staffs than do elementary schools. Furthermore, we have seen that secondary teachers exhibit more dedication to work (in both professional and union activity) than do elementary teachers. These observations, while supporting the original propositions, are not conclusive, since the effects of occupational and organizational variables are not isolated. This chapter will attack that problem. Only if we observe significant correlations between individual organizational elements and the dependent variables, controlling for occupation and personal characteristics of respondents, can we be confident that the observed relationship between organizational type and teacher responses is not due merely to occupational or personal differences in responding teachers. Since the range of organizational variation is significantly narrowed by controls on school level, the difficulty of establishing significant and meaningful support for the propositions is magnified.

Before testing the critical propositions, I will consider the major alternative explanations of variation in dedication to work: personal, family and satisfaction variable.

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Effects of Personal and Family Variables Upon Dedication to Work

Typical conventional explanations for differences in worker dedication levels allude to the importance of sex, age, experience, number and age of children as critical variables. To check the importance of these variables in explaining differences in dedication levels of both elementary and secondary teachers, correlations between dedication indicators and personal and family variables are presented in Table 25.

On the whole, the personal and family characteristics of elementary and secondary teachers are only weakly related to the indicators of self-investment and dedication. The strongest relationships involve age and experience of workers: older workers and those with more experience participated in union activities significantly more often, particularly at the local and building level, are significantly less likely to take courses, whether required or not and are slightly more likely to read educational journals. Older secondary teachers are slightly less likely than their younger colleagues to be enthusiastic about re-entering education if they could make the choice again. Age and experience have almost no effect on career plans and have no significant effect on any of the indicators of level of self-investment.

Looking at the other individual variables, one notes that sex has almost no effect on self-investment or

TABLE 25. -Personal and Family Characteristics by Self-Investment and Dedication, Correlations by School Level.

	Personal and Family Variables							
Self-Investment	Exper.	Age	Sex*	# 5yrs	#5-12	#12-18	#18	Total # Children
Inv. Status								

TABLE 25.--Personal and Family Characteristics by Self-Investment and Dedication, Correlations by School Level.

Self-Investment	Personal and Family Variables							
	Exper.	Age	Sex*	# 5yrs	#5-12	#12-18	#18	Total # Children
Imp. Status	.04/ .03	.04/ .02	.04/ 0	.05/ 0	-.03/ .08	-.05/-.02	.02/ .06	0 / .05
Imp. Intr.	.10/-.02	.10/-.02	.03/ 0	-.02/-.01	0 /-.02	-.07/-.01	.10/ .06	.01/ 0
Idea-Close	.03/-.04	-.03/-.03	-.05/ .01	-.01/-.01	-.08/ 0	-.09/-.02	.07/ .05	-.04/ .03
Ref: Collea.	.03/-.04	0 /-.01	0 / .03	.01/ .05	-.02/ .04	-.08/ 0	.01/-.04	-.04/ .01
Ref: Sups.	0 /-.02	-.02/-.02	.01/ .05	-.01/ .03	-.04/-.03	-.13/-.03	-.02/ 0	-.09/-.01
Career Up Desired	-.06/ 0	-.09/ .01	-.01/ 0	-.05/ .03	-.03/-.02	-.07/-.01	-.09/ 0	-.11/ .01
Dedication:								
Member TO	.24/ .23	.24/ .22	-.02/-.02	-.06/-.05	-.08/ .01	-.01/ .05	.11/ .11	.04/ .05
Local Ofc.	.27/ .31	.21/ .27	-.21/-.07	0 / 0	.03/ .08	-.05/ .07	.02/ .05	-.01/ .11
State Ofc.	.07/ .14	.03/ .10	-.01/ .01	.03/-.01	-.01/ 0	-.03/ .02	.08/ .05	.02/ .04
State Prog.	.27/ .18	.23/ .19	.06/-.02	-.08/-.01	-.04/ .06	-.05/ .02	.09/ .03	-.01/ .06
# TOs	.32/ .22	.28/ .19	.07/ .04	-.06/-.04	-.04/ .06	0 / .07	.18/ .08	.08/ .07
State Comm.	.20/ .19	.14/ .17	-.08/-.03	-.04/ .02	-.04/ .07	0 / .09	.10/ .06	.03/ .10
Local Comm.	.36/ .32	.28/ .31	-.10/-.07	-.05/ .01	0 / .05	-.01/ .11	.11/ .04	.06/ .10
Bldg. Rep.	.42/ .41	.38/ .36	-.11/-.07	-.03/ 0	-.02/-.02	-.02/ .03	.14/ .09	.06/ .06
#Conf.	.10/ .12	.07/ .12	-.05/ .05	-.10/-.05	-.04/-.04	-.02/ .02	.05/ .09	-.03/ .02
#Books	.01/ .04	.01/ .06	.01/ .10	.01/-.04	-.01/ .02	-.01/-.03	.06/-.01	.03/-.06
#Journals	.11/ .15	.18/ .19	-.01/ .08	-.08/-.09	-.02/-.04	.02/ .04	.13/ .02	.06/-.03
#Hrs. Read	.08/ .12	.06/ .14	0 / .06	-.05/-.03	-.02/-.14	-.02/-.01	.07/ .05	0 /-.02
Career Plan	0 /-.09	-.06/ .04	.01/ .15	.01/-.11	-.20/ .10	-.22/-.11	.05/-.02	-.17/-.17
Active TO	.17/ .06	.12/ .09	-.04/-.17	-.05/ .08	.03/-.03	.05/ .12	.03/-.01	-.03/ .17
Courses	-.40/-.43	-.35/-.40	-.12/ .01	.07/ .06	.07/-.01	.04/ .08	-.12/-.24	-.03/-.14
Courses Required**	-.30/-.23	.12/-.22	.13/ 0	.01/ .03	.01/-.16	.02/-.08	-.02/-.09	-.01/-.06
Re-Enter	-.01/-.15	.02/-.12	.08/ .22	.01/ .04	.03/-.13	.05/-.10	.01/-.06	.04/-.15
Absent	.16/ .09	.05/ .05	.08/ .14	-.06/ .08	0 / .15	-.01/ .06	.07/ .08	.01/ .06

Elementary/Secondary

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*F = 1, M = 5
**1 = no; 5 = yes

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dedication of workers. At the secondary level only, males are slightly more likely to read professional books, to be absent and to express enthusiasm about re-entering education and about career plans but females report slightly more activity in teacher unions, especially at the elementary level. Sex has almost no effect on level of self-investment in work.

Turning to family compositional variables, teachers with children under age 5 are distinguished only by slightly less ambitious career plans at the secondary level, lower attendance at conferences and slightly fewer journals read. Children between ages 4 and 12 have the most depressing effect on time teachers spend reading (-.14 correlation) and willingness to re-enter education. The presence of children 5-12 is slightly correlated with rate of absenteeism but is also positively correlated with taking courses not required by contracts. The relationships between presence of children and both self-investment in work and union activities are very weak. However, the presence of children aged 12 to 18, is related to lower career desires, especially among elementary teachers and, at the secondary level, less frequent enrollment in college courses. Children over 18 strengthen the trends of the last category but also correlate with teacher participation in union activity.

The total number of children of respondents has a slight negative effect on teachers' desire for upward career movement, on taking courses and on the eagerness of

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None of the correlations suggest any strong or clear explanation of self-investment of teachers, although age and experience appear to encourage union activities. Since the data on effects of children are probably confounded by systematic variation in the ages of respondents, a partial correlation, controlling for the effects of age, was run to see the independent effects of presence of children, sex and experience.

As Table 26 shows us, controlling for age made the most difference in the relationships between experience and several aspects of dedication. Eleven of these correlations were reduced by .10 or more for both elementary and secondary teachers, although experience does appear to play an independent role in a few of these cases, notably holding local office, number TOs joined, working on state or local committee, acting as building representative and taking courses. The negative correlation between experience and taking only required courses was explained as an effect of age for secondary teachers but not for elementary teachers. Table 25 sets out all the cases where controlling for age affected the original correlations by .10 or more. None of the correlations between aspects of self-investment and personal or family characteristics was affected by controlling for age. Age greatly affects the importance of family composition, reducing several correlations between

TABLE 26.--Effects of Controlling for Age Upon Correlations Between Personal/Family Characteristics and Dedication to Work.

Dedication Variables	Experience		Sex		#Ch. >18		Total # Children	
	Total	Controlled	Total	Controlled	Total	Controlled	Total	Controlled
Member TO	.24/ .23	.08/ .09	--	--	.11/ .11	-.02/ 0	--	--
Local Ofc.	.27/ .31	.17/ .16	---	--	.02/ .05	-.11/-.10	--	--
State Prog.	.27/ .18	.15/ .04	--	--	--	--	--	--
# TOs	.32/ .22	.17/ .11	--	--	.18/ .08	.04/ -.02	--	--
State Comm.	.20/ .19	.15/ .09	--	--	--	--	--	--
Local Comm.	.36/ .32	.24/ .12	--	--	.11/ .04	.10/-.14	--	--
Bldg. Rep.	.42/ .41	.30/ .12	-.11/-.07	-.21/-.08	.14/ .09	-.07/-.11	--	--
Jls/mth.	.21/ .15	.11/-.02	--	--	--	--	--	--
Hrs Read	.08/ .12	.05/ 0	--	--	--	--	--	--
Courses	-.40/-.43	-.21/-.18	--	--	-.15/-.24	.05/-.04	-.03/-.14	-.02/-.-2
Required	-.36/-.23	-.34/-.08	--	--	--	--	--	--

Elementary/Secondary

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presence of children and teacher responses. Respondent's age does not affect any of the correlations involving children under 18. For parents of older children, controlling for age pushed the correlation between presence of children and union activity close to zero in three cases, weakly reversed the correlations between presence of children and holding local office, serving on local committees and serving as building representative. The most interesting overall effect is that presence of children really explains very little about teacher behavior, while experience plays a weak role and age has the greatest effects of all the personal and family variables.

The net effects of personal and family variables upon teacher behavior are quite weak even though many of the correlations are statistically significant with this large N. Since age of respondent is empirically most important and since sex of worker is traditionally expected to discriminate between more and less dedicated workers, even though this was not confirmed here, both of these variables will be considered and controlled again when the effects of organizational variables are examined.

Before leaving this topic, two factors underlying the apparent importance of age as an explanatory variable must be mentioned. First, older and more experienced workers have had more chances to work on union activities. Only a limited number of people can be elected to office, contribute to programs or serve on committees in one year.

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Thus, the more years one has had these opportunities, the greater the overall probability that one has been involved in these activities. With respect to union activities, the survey questions ask about one's history of union involvement; the professional questions, however, are restricted to recent or current involvements. For these items, older and younger teachers have equal opportunity to display dedication and, in fact, age does not greatly discriminate workers on these variables, nor on evidence of self-investment. It appears possible, then, that the importance of age and career stage as determinants of self-investment and dedication may have been overstated in some explanations of work behavior.

Effects of Satisfaction on Dedication to Work

Another popular explanation for variations in worker behavior has been the idea that more satisfied workers are more productive, more efficient and, in general, more dedicated to work (see U.S. Department of Labor Monograph #30, 1974, summarizing this explanation). My proposed explanation of worker dedication hinges on the assumption that satisfaction does not affect dedication. As part of the evaluation of my propositions, it is appropriate to test the competing explanation as well; hence, this section covers data regarding the connection between level of job satisfaction and level of dedication to work.

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Using the data presented in Chapter V as clues, one would expect to find either no relationship or a weak negative relationship between satisfaction and dedication, since elementary teachers were significantly more satisfied and less dedicated than secondary teachers. The data presented in Table 27 detail the observed relationship between satisfaction and dedication within occupational type.

As we see from Table 27, the relationship between job satisfaction and dedication to work is very weak for both elementary and secondary teachers, with only one correlation above .10. In that one case, satisfaction with authority relations appears to slightly encourage secondary teachers to express enthusiasm about re-entering education if they had the chance.

Since age or sex of respondent might conceivably suppress the actual relationship between some aspects of satisfaction and of dedication, the effects of these personal variables were partialled out. The resulting correlation matrices are almost identical to that in Table 27 with no more than .02 change in any correlation. Thus it seems safe to conclude that age and sex are not suppressing any strong relationship between satisfaction and dedication.

Since the correlations within occupations are so weak (Table 28) and since the comparison of means across occupations (Table 22, Chapter V) did not support the popular idea that high job satisfaction produces greater

TABLE 27.--Correlations Between Job Satisfaction and Dedication, by Occupation.

Dedication	Sat-Physical	Sat-NonPhysical	Sat-Authority
Member TO	.05/-.03	-.06/ 0	-.02/ 0
Local Office	.03/-.05	-.06/ 0	.04/ 0
State Office	-.02/-.09	-.07/-.01	-.01/-.01
State Prog.	0 /-.06	0 /-.01	.03/-.01
No. TOs Member	.04/ .02	-.01/ .05	.04/ .05
State Comm.	-.01/-.02	-.01/ .05	-.01/-.03
Local Comm.	-.02/-.07	-.07/ .04	0 /-.03
Building Rep.	.02/-.03	-.04/-.01	.04/-.05
Workshops	.01/-.01	-.04/ .03	-.02/ .03
Books Read	-.03/-.07	-.01/-.06	.01/ 0
Subscribe	.06/-.02	-.01/ .05	0 / .04
Journals	.05/-.06	-.04/ .02	.03/ .01
Time Read	.02/-.04	.04/-.06	.03/-.09
Career Plan	.05/-.04	-.04/ .02	-.02/-.03
Courses	0 /-.06	.06/-.05	-.01/-.01
Required	-.02/ .09	.01/-.03	.06/ .05
Re-enter	-.02/ .09	-.08/ .06	.01/ .16
Absent	.03/ 0	.03/ .01	-.02/-.03

Elementary/Secondary N = 606/798

dedication to work, it appears that my propositions do not underestimate the role of job satisfaction in explaining worker behavior. However, it is possible that job satisfaction is in some way critical to level of workers' self-investment. To check that possibility, correlations between the three types of job satisfaction and the three most critical aspects of self-investment are presented in Table 28.

TABLE 28.--Correlations Between Job Satisfaction and Self-Investment, by Occupation.

Self-Investment	Sat-Physical	Sat-Nonphysical	Sat-Authority
Intrinsic Import.	.08/ .09	.09/ .10	.27/ .28
Close Coll. Import.	.01/ .01	0 / 0	0 / .04
Desire Career Up	-.15/ .08	0 / .02	-.06/-.01

Elementary/Secondary N = 606/798

Table 28 presents contradictory data regarding the relationship between job satisfaction and self-investment in work. While none of the aspects of satisfaction has any effect on importance of close colleagues as a reference group, satisfaction with physical aspects of the job has a slight negative influence on desired mobility, especially among elementary teachers. Furthermore, satisfaction with

authority relations shows a moderate positive correlation with importance of intrinsic aspects of work for both elementary and secondary teachers, while the other aspects of satisfaction are very weakly supportive of expressed importance of intrinsic aspects of work. The observed data do not permit one to conclude that satisfaction produces self-investment; it is at least as likely that teachers who are very concerned with intrinsic aspects of work simply do not attend much to extrinsic circumstances. Whatever the explanation, the positive relationship between satisfaction and intrinsic importance of work challenges my assumption that satisfaction is unrelated to self-investment, although the character of that relationship cannot be determined from the data at hand.

In summary, the data show that satisfaction is in some way related to one indicator of self-investment but that satisfaction does not at all explain observed variations in any of the indicators of dedication to work.

Effects of Self-Investment Upon Dedication to Work

Having verified the limitations in competing explanations of worker dedication, I will now present data directly bearing on the proposition that level of self-investment in work is the best predictor of level of dedication to work.

As a preliminary step in that analysis, I examined the internal consistency of the survey items used as indicators of self-investment. Six possible indicators of level of self-investment were used in the original survey: use of work-related reference groups (with close colleagues representing a more ideal answer than superiors), the importance of work to the respondent (with intrinsic bases most closely meeting criteria for high self-investment but also including the possibility that concern for status as a professional represents an evidence of more self-investment than does concern for pay, vacations and hours of work), and, finally, mobility orientation, as evidenced by teacher perceptions of where they will be in five years. If these six are equally valid indicators of a unidimensional variable, self-investment, the correlations among these items should be strong and positive. Table 29 presents the actual correlations among these indicators.

The data presented in Table 29 suggest that there are at least two dimensions underlying the self-investment variable. The two types of work-based reference groups show a much stronger correlation with each other than with any other variable, for both elementary and secondary teachers, although the reference group items are moderately related to desired career mobility. By the same token, importance of status and importance of intrinsic aspects of work show moderate correlations for both groups of teachers but neither is much related to any of the other

TABLE 29.--Correlations Among Indicators of Self-Investment, by Occupation.

	Career	Status	Intrinsic	Close Col.	Superiors	Desire Career
Plan Career Up	.02/ .01					
*Intrinsic Imp.	.06/-.02	.39/ .38				
*Ref: Close Coll.	.05/-.04	.11/ .16	-.03/ .04			
Ref: Superiors	0 /-.05	.14/ .15	.05/ .06	.54/ .55		
Desire Career Up	.03/ .04	.13/ .20	-.07/ .04	.39/ .29	.27/ .19	

Elementary/Secondary N = 606/798

*Best theoretical basis as indicators of self-investment.

aspects of self-investment in work. Finally, plans for upward career either do not represent self-investment or represent yet a third dimension of that variable, since plans show no significant correlation to any other item. This may be due to the low variability on the item--only 10 percent of the teachers expect to hold administrative jobs within five years. It is further possible that teachers planning an imminent move to administration may withdraw their self-investment from the teaching role in anticipation of that move. This explanation would suggest either that career planning is not part of self-investment in work or that workers distinguish clearly between self-investment in current position and self-investment in a total career.

In assessing the evidence regarding internal correlations among hypothesized indicators of self-investment, one must check whether the items actually form a scale. Perhaps use of work-related reference groups is the core of self-investment, with career desires, then importance of intrinsic and status aspects to work, then actual plans as increasingly stringent tests of level of self-investment. If this is the case, one would expect differential importance among these items as predictors of level of dedication to work. Both to check this possibility and also because the lack of internal correlation among the items prohibits aggregating the indices of self-investment, separate correlations were calculated between each

indicator of self-investment and each evidence of dedication to work. Table 30 presents these correlations.

Contrary to the proposition that level of self-investment predicts level of dedication to work, the data presented in Table 30 show no strong correlations between these two variables. A few interesting, though weak, tendencies can be mentioned, though: anticipation of imminent career moves almost always correlates negatively with behavior indicating dedication to work, both at elementary and secondary levels, while desire for upward career movement has a less consistent relationship with dedication. Use of either superiors or close colleagues as important reference groups appears to encourage elementary teachers to spend time reading but has no effect at the secondary level. Neither importance of status nor importance of intrinsic aspects of work fared any better as predictors of dedication: correlations with these two variables are weak, insignificant and contradictory.

In searching for an explanation for these disappointing results, I controlled the effects of personal characteristics to see if age, sex or presence of children might be suppressing stronger relationships. Sex of worker did not affect any of the correlations by more than .02. The other controls showed no effects on correlations involving career plans, desired career, intrinsic or status aspects of work or importance of superiors as reference group. However, age, number of children under 5 and total

TABLE 30.--Correlations Between Self-Investment and Dedication to Work, by Occupation.

Dedication	Plan Career	Imp. Stat.	Imp. Intrin.	Close Col.	Superiors	Desire Career
Active TO	-.01/-.16	.10/-.01	.06/ .04	.04/ .03	.05/-.03	.01/ .03
Local Off.	-.05/-.01	.03/ .06	.06/ .05	-.02/ .04	.01/ .02	.01/ .03
State Off.	-.02/ .03	-.02/ .02	-.03/ .02	-.02/ .06	-.02/ .02	-.02/ .06
State Prog.	-.08/ .10	-.04/ .01	0 /-.04	.02/ .01	-.02/ 0	0 / .04
No. TOs Mem.	-.07/-.04	.03/ .09	.04/ .05	-.01/ .01	-.05/-.03	-.04/-.03
State Comm.	-.06/-.01	.04/ 0	-.04/-.03	.01/ .01	-.06/-.05	.02/ .03
Local Comm.	-.08/-.04	.03/ .01	.02/ .01	.01/ 0	-.02/-.01	-.01/ .02
Bldg. Rep.	-.06/-.04	.07/ .06	.13/-.01	.02/ .03	.11/-.01	0 /-.02
Workshops	.02/ .01	.03/-.01	-.06/ .05	-.02/ 0	-.03/-.02	.01/ 0
Books Read	-.06/ 0	-.04/ .02	.01/-.01	-.07/ .05	.06/ .10	-.04/-.04
Journals	-.10/-.02	.05/ .03	.09/ .05	-.02/ .03	0 / .01	-.03/-.05
Time Read	-.02/ .02	.03/ .05	.02/ .05	.12/ .01	.11/-.01	.02/ .01
Courses	-.06/-.04	.02/-.01	0 /-.01	.01/ .02	-.03/ .03	.04/ .05
Required	-.06/ .02	-.02/-.03	.05/ .03	-.05/-.05	-.07/-.01	-.11/-.02
Re-enter	-.07/-.07	-.07/ .07	-.02/ .06	-.03/ 0	0 / .02	.02/-.05
Absent	.02/ .05	-.03/-.02	.01/-.02	0 /-.04	-.01/-.01	0 / 0

Elementary/Secondary N = 606/798

number of children each suppressed a stronger relationship between importance of close colleagues and participation as a building representative for elementary teachers only and a slightly stronger positive relationship between close colleagues and number of job-related books read by both elementary and secondary teachers. Despite these controls, the correlations between self-investment and dedication remain very weak. It appears, though, that collegial reference groups have a slightly greater effect on the behavior of teachers who are younger, have smaller families and/or fewer young children.

The net effect of controlling for personal and family characteristics is a very slight increase in support for the propositions. However, from the data at hand, the proposition that high self-investment in work produces dedication to work for both occupations cannot be confirmed. Nevertheless one piece of information may be a useful product of this limited data. If self-investment at work is only one kind of self-investment and if work competes with other activities like family and recreational activities, then the discovery that one indicator of self-investment is most centrally affected by evidence of other types of commitment suggests that this indicator, importance of close colleagues as a reference group, may be the best indicator of self-investment in work. On the other hand, it is possible that the questions about whose opinion is

important to the respondents had different meanings for those committed to young families and to other teachers.

In summing up the effects of self-investment in work upon dedication to work for elementary and secondary teachers, it is apparent that the proposition linking the two has not received significant support from the data at hand, despite the introduction of controls on possible suppressor variables. Nevertheless, it remains possible that the organizational variables hypothesized to explain variations in both self-investment and dedication may exert some effects on either or both of these variables.

Effects of Organizational Variables Upon Self-Investment and Dedication

According to the propositions presented in Chapter III, even when occupation of worker is controlled, several organizational variables should encourage high self-investment in work and, hence, greater dedication. While the connection between self-investment and dedication has not been supported by the intra-occupational data, it is still possible that some effects due to variation on organizational dimensions might be isolated, particularly if the problems encountered above stem from inadequate measurement of self-investment. The organizational variables expected to encourage self-investment and dedication are: greater hierarchy, specialization, standardization, formalization, universalism, expertise of staff and lower levels of centralization.

The first step in the analysis of organizational effects is to see how variations in the organizational setting influence teachers' perception of work setting, since these perceptions are assumed to be critical to self-investment in work. Table 31 sets forth the correlations between organizational variables and perceptions of work by occupational group. Several school compositional variables are considered as possible independent variables as well.

From Table 31, one sees that the relationship between organizational structure and perceptions of work environment are weak and, in many cases, inconsistent across occupational lines. It is important to remember here that the range of variation in organizational structure is very narrow for both elementary and secondary schools. It is possible that the actual differences are too small to produce great differences in teachers' perceptions. Since there is more difference between elementary and secondary schools than within either category alone, the fact that effects of several organizational variables appear to be inconsistent by occupation may indicate a curvilinear relationship between structure and perceived problems or advantages for some items.

Looking at specific organizational influences, it is apparent that only four variables can claim any real effect at all upon teacher perceptions of organizational setting. The three types of specialization each appear to

TABLE 31.--Correlation of Organizational Structure and Teachers' Perceptions of Work Setting.

	Perceptions								
Organization	Coop Out	Co-In	IdeaOut	IdeaIn	Id-Close	PoorAd	PrinSu	TO-n	OwnInfl.
Hierarchy	.06/-.05	-.02/-.02	.01/-.03	-.04/ .03	.01/-.01	-.01/ 0	.07/ .04	.05/-.04	0 /-.04
Standardiz.	.04/ .07	-.04/-.08	0 /-.02	-.04/-.03	-.08/-.01	.07/ .08	.01/ 0	.03/ .07	.05/ .01
Formaliz.	.05/-.05	.08/-.08	.05/ 0	-.01/-.01	.06/-.06	.02/-.05	.04/ .05	.04/ .02	.01/ .04
Spec. by Field not level	.03/-.11	-.03/ 0	0 / .03	0 / .01	.01/ 0	.03/-.15	.12/ .13	-.04/-.06	-.06/-.04
Spec.: Teach. in major	.09/-.03	.03/ .02	.01/ .03	-.05/ .02	0 /-.02	-.03/-.11	.01/ .13	-.02/-.03	-.06/ 0
Universal.	.01/-.09	-.05/ .11	-.09/-.03	-.03/ .06	-.03/ .05	-.01/-.08	-.10/-.04	.06/-.02	.04/-.04
Expertise	-.04/ .01	-.07/ .01	.04/ .04	.02/-.01	-.01/-.02	-.03/ .02	.08/ .03	-.06/ 0	-.01/ .06
Centr-Pr.	.03/ .05	.06/-.16	.04/-.05	.06/-.09	.09/-.13	0 / .07	0 / .02	.01/ .03	-.02/-.04
Centr.-Ts.	.02/ .07	.03/-.04	0 / .01	-.01/ 0	-.04/ .01	.02/ .01	.04/ .03	.06/ .01	.05/ .07
Size Spec. Staff	-.03/-.03	-.04/ .01	.01/-.07	-.01/ .02	-.05/-.05	-.10/ .04	.10/-.15	-.06/-.03	-.05/-.01

Elementary/Secondary

N = 606/798 teachers
(in 38/15 schools)

make the administration appear more competent to teachers and also lead teachers to say that their principals support teachers (except for secondary teachers in schools with many specialists, a condition that appears to make principals seem less supportive of teachers). The only other characteristic of organizational structure that has even minimal effects on teachers' perceptions of work setting is the principals' assessment of centralization of decision-making in each school, which is negatively related to in-school cooperation among secondary teachers and which inhibits idea exchange with secondary teachers' close colleagues.

To check whether any organizational characteristics, structural or compositional, meaningfully affect teachers' perceptions of work situations, I examined correlations between these perceptions and several school compositional variables. Since these variables are not central to the propositions being tested, I will not consider them in detail. However, it is essential to note that none of the compositional variable, either--including student ability, SES, homogeneity, percentage of female teachers, sex and experience of principals--show any significant correlation with teacher perceptions of school features. Each of the correlations involved is $\leq .14$. Thus, it seems safe to conclude that teachers' perceptions of good and bad aspects of their schools are only tenuously related to identifiable features of school structure or composition.

Given this setback to the propositions, the next question to be considered is the determination of the best predictor of teachers' self-investment and dedication to work--teacher perceptions of organizational problems or structural features identified by the researcher? Turning to Table 32 one can observe the correlations between teachers' perceptions of work setting and the indicators of level of self-investment in work.

The data in Table 32 suggest a moderate positive correlation between favorable perceptions of the job setting and level of self-investment in work. Once again, the teachers who actually plan to move up to administrative posts within five years show different responses to perceptions about school than do teachers exhibiting other evidence of self-investment in work. None of the perceived characteristics or settings appear to have much effect on planned upward movement, although there are some moderate effects upon desire for upward movement. These facts add to the evidence that planned career movement is quite different than the other five variables in meaning and implication. Whether it belongs as an indicator of self-investment or not, it appears quite conclusive that planned mobility is not produced by any of the variables I had thought would affect it.

Turning to the indicators of self-investment that do appear to be affected by teacher perceptions of setting, one sees that two types of perceived problems, TO hindrance

TABLE 32.--Correlations Between Perceived Quality of Work Setting and Self-Investment in Work, by Occupation.

Perceived Setting:	Indicators of Self-Investment					
	Plan-Car.	Imp.-Status	Imp.-Intrin.	Superiors	Cl. Coll.	Desire Career
Coop. Out.	0 /-.04	.41/ .40	.45/ .47	.17/ .14	.15/ .15	.01/ .07
Coop. In.	.01/ 0	.28/ .28	.11/ .17	.19/ .20	.22/ .27	.16/ .18
Idea Out.	-.03/-.05	.10/ .13	.17/ .22	.23/ .26	.14/ .20	-.05/ .02
Idea In.	.06/ .03	.22/ .25	.11/ .17	.13/ .18	.22/ .29	.19/ .22
Idea Close	.02/-.05	.18/ .18	.19/ .20	.15/ .20	.18/ .26	.05/ .07
Poor Admin.	.02/ .05	-.07/-.04	-.08/-.04	.22/ .17	.16/ .13	.32/ .23
Prin. Supp.	. 0/ .01	.09/ .08	.09/ .12	.20/ .23	.22/ .29	.14/ .16
TO Hinder	.03/ .07	.10/ .07	-.06/-.02	.20/ .19	.18/ .18	.25/ .18
Own Influ.	.04/ .03	.10/ .12	0 / .07	.27/ .33	.37/ .45	.38/ .29

Elementary/Secondary Teachers N = 606/798

of teacher performance and poor administration, each moderately encourage teachers to express a desire for upward career movement. However, the strongest single correlate of desired career movement is the teachers' perception of extent of own influence over others at work. Thus, in explaining the bases of teachers' differential eagerness for career movement, the most significant influences appear to be the perception of difficulties in the school environment plus the respondent's feeling of efficacy in the present school setting. It is possible that perceived efficacy, however, is not a determinant of career planning but that both stem from a common source, such as the teachers' confidence in own abilities and willingness to initiate action. Since perceptions regarding own influence were not found to correlate significantly with level of centralization in the schools, it is possible that perceived efficacy is based on each teacher's comparison of self with others in the school, thereby holding constant actual centralization of authority.

Turning back to Table 32 to look for other possible effects of teachers' perception of problems in their schools, the only other indicator of self-investment that appears to be related to such perceptions is teachers' reliance upon superiors as an important reference group. Surprisingly, teachers who saw poor administration also tend to use superiors as an important reference group. This suggests to me the possibility that teachers who see

administrators as a major source of problems find it necessary to try to avoid administrative action or attention concerning their own work, making it important that superiors hold good or neutral opinions about the teacher.

Teachers who use superiors as an important reference group also see the Teacher Organization as a source of problems hindering the achievement of educational objectives. It would be useful to know whether difficult unions drive teachers into alliance with administrators or whether concern for the opinions of superiors leads teachers to agree with administrators about the extent of difficulties caused by the unions. This intriguing question cannot be answered with cross-sectional data.

Turning to teachers' favorable perceptions regarding work environment, the propositions lead us to expect that more favorable perceptions will produce greater self-investment in work on the part of teachers. The correlations reported in Table 32 lend some support to these ideas; except for one indicator of self-investment, planned upward movement, correlations between favorable perceptions and self-investment are positive and, in some cases, fairly strong. In general, it appears that cooperative work settings with frequent exchange of ideas among personnel, support of teachers by principals and feelings of efficacy on the part of teachers promote self-investment in work. Considering differences in the strength of these correlations,

one notes that perceived principal support and perceived efficacy affect career plans and importance of status or intrinsic aspects of work very little but greatly encourage the use of work-related reference groups and teachers' desire for upward mobility. Cooperation within the school moderately correlates with importance of status and intrinsic aspects of work but has slightly less effect on the importance of opinions of coworkers. Extent of idea exchange of all sorts positively correlate with the importance of status and intrinsic aspects of work and the importance of coworkers opinions but these correlations are fairly weak, ranging from .10 to .29.

Comparing elementary and secondary teacher data, one sees great consistency in the relationship between variables across school level. Except for a few pairs of correlations near zero, the elementary and secondary teacher coefficients for each relationship are the same in sign and, in most cases, very close in degree of association. This evidence supports my expectation that occupational and personal variables would not explain all the variation in level of teachers' self-investment in work. Instead, the data suggest that similar perceptions of work structure produce some similarities in teacher reactions across occupational lines and despite differences in personal and family characteristics by level.

In summing up the evidence presented in Table 32, the proposition linking favorable perception of work climate

to extent of self-investment in work is moderately supported for both occupational groups. Whether teacher's perception of structure is superior to more objective indicators of structure in predicting teacher's self-investment remains to be seen, however. Although my propositions suggested that perceptual indicators would be superior, I had assumed that there would be significant correlation between perceptual and documentary data about work setting. The lack of any strong correlation (already noted in Table 31 and consistent with other research evidence showing typical low correlations between perceptual and objective measures) invalidates that assumption and transforms this attempt at proposition-testing into a more exploratory endeavor. At this point, one must ask whether the non-perceptual data on school structure can exert any independent effect on level of self-investment in work. Data presented in Table 33 may suggest an answer to that question.

Contrary to the propositions, the correlations reported in Table 33 do not offer any support for the idea that structural or compositional school variables affect teachers' level of self-investment in work. Not only are the correlations very low (all under .12) but also they are inconsistent by school level. Since it is conceivable that structural variables might have differential impact depending upon certain characteristics of teachers, partial correlations were run to control for the effects of age, sex, number of children and teacher's level of education. Also,

TABLE 33.--Effects of School Organization and Composition Upon Teachers' Self-Investment in Work.

School Variables	Self-Investment					
	Plan Car.	Imp Stat	Imp Intr.	Imp Super.	Imp. Colleague	Desire Career
Hierarchy	-.01/-.03	.02/ .03	.03/ .03	.01/-.06	-.02/-.06	.01/-.08
Stand.	.01/ .02	-.02/-.06	-.02/-.03	.12/ .04	.02/-.02	-.02/ .06
Formal.	.03/-.01	.06/-.12	-.02/-.01	.08/-.02	.04/-.08	.02/ .01
Spec. in Subject	0 /-.05	0 /-.04	-.01/-.04	0 /-.06	-.04/-.10	0 /-.10
Spec. in Major	-.03/-.05	.06/ .02	.07/ .03	.07/-.03	.03/-.04	-.02/-.08
Universal.	.02/ .06	.03/ .04	-.04/ .02	-.06/-.08	.01/ .03	.05/ 0
Expertise	-.05/-.08	-.02/-.02	-.02/ .01	.01/ 00	-.07/-.05	-.08/-.04
Centr. Pr.	-.08/ .04	.07/-.06	-.02/-.03	-.03/ .07	0 /-.06	.05/ .04
Centr. Ts.	.05/ .01	-.05/-.03	-.01/-.04	-.02/ .03	.03/-.01	.01/ .04
Size Spec. Staff	.03/ 0	0 / .05	.03/ .02	.02/ .02	-.03/-.02	-.09/-.06
SES	0 /-.05	0 /-.07	.04/-.04	-.03/ .01	-.08/-.04	-.07/-.02
Homog.	-.04/ .03	-.01/-.03	.01/-.01	.02/ .04	-.05/ .02	-.05/-.04
Ability	.01/-.01	0 /-.06	.06/-.05	-.04/-.03	-.04/-.07	-.09/-.04
Prin. Exper.	.02/-.02	.02/ .04	.07/ .02	-.03/-.02	-.01/ .07	-.01/-.02
Prin. Sex*	.04	-.01	.01	-.02	.03	0
% F Teach.**	.05	.01	.09	0	.08	0.01

Elementary/Secondary

N = 606/798 teachers; 38/15 schools

*All secondary prin. = male
Male = 1; Female = 5.

**All secondary schools scored "low" on percent female.

to eliminate the possible effects of teacher interaction with more or less able principals and students, effects of principal experience and mean student ability level were partialled out as well. Nevertheless, it appears that none of these variables affect the correlations between aspects of school structure and teachers' level of self-investment by more than .04. Thus, I conclude that, if there is a relationship between structure and self-investment within the fairly narrow range of variation found in elementary schools or in secondary schools, that relationship either is masked by the effects of some unknown variable or requires finer measurement of the relevant variables than was achieved in this study. Data from this study suggest that teacher perceptions of setting are much more critical than other indicators of structure as predictors of level of self-investment.

The final check on the relative importance of structural factors and teachers' perceptions of setting in explaining teacher activity is to consider the effects of each variable upon teachers' dedication to work. Given the lack of correlation between structural variables and both the expected sets of intervening variables, perceptions of structure and level of self-investment, one cannot anticipate much support for the propositions. Data presented in Table 34 confirm those gloomy predictions, since school structure and teacher behavior appear to be totally unrelated. None of the correlations exceed .18 and most fall between

TABLE 34.--Correlations Between Structural Variables and Dedication to Work, by Occupation.

	Structural Variables									
Dedication	Hier.	Formal.	Stand.	Spec. Subj.	Spec. Major	Univers.	Expert.	CenP	CenT	Spec. Staff
Member TO	.02/ .02	-.02/-.06	.08/-.06	-.08/ .04	0 / .04	-.05/ .11	-.11/-.06	.07/-.11	.05/-.03	-.15/-.04
Active TO	-.02/ .02	.06/ .09	-.04/-.06	-.11/-.05	.04/ .03	-.11/ .13	.02/-.01	-.03/-.07	-.14/ .01	-.01/ 0
Local Ofc.	-.03/-.07	-.02/-.01	.09/ .07	-.01/-.05	.03/-.09	-.05/-.01	.01/-.04	-.04/ .01	0 / .07	.01/-.05
State Ofc.	.04/-.02	.03/ .02	.05/-.01	.05/ .05	.05/ .01	-.06/ .06	.09/-.02	-.03/-.04	0 / .05	.07/ .04
State Prog.	0 / .01	-.03/-.01	.03/-.05	-.08/ .05	.11/ .04	-.06/ .07	0 /-.01	-.08/ .06	.01/-.02	.08/ .04
# TOs	.01/ 0	-.06/ .01	-.05/-.16	-.10/ 0	.04/ .15	.02/ .16	-.17/ .14	-.09/-.13	.03/-.13	-.10/ .11
State Comm.	-.01/ .01	.01/ .03	-.03/-.01	.05/ 0	.06/ .03	-.04/ .03	.06/ .06	.03/-.07	0 / 0	.05/-.01
Local Comm.	.01/-.01	.03/-.03	.01/ 0	-.02/-.06	.08/-.02	-.12/ .06	.04/-.01	-.05/-.07	-.02/ .01	.09/-.02
Bldg. Rep.	.02/-.04	-.06/-.06	.06/ .01	-.01/-.09	.02/-.14	-.02/ .09	-.02/-.12	-.01/-.04	.01/-.01	-.01/ 0
Workshops	.04/ .01	.03/-.02	.06/-.06	0 / .02	.01/ .04	-.05/ .08	-.05/ .03	.06/ .10	-.02/-.06	-.10/ .04
Books	-.06/ .01	.06/ .01	-.04/ .01	.06/-.01	-.09/-.02	-.05/-.04	.02/ .02	-.04/ .01	-.05/ 0	.03/ .08
Journals	.02/-.03	-.08/ .05	-.04/ .01	-.06/-.03	.03/ 0	.03/ .02	.01/ .02	.05/ .01	-.02/-.06	.04/ .03
Time Read	-.04/-.04	-.02/-.06	-.03/-.03	-.05/-.09	-.04/-.04	0 /-.03	-.03/ .01	-.05/ .02	.02/ .02	-.01/ .01
Courses	-.02/ .02	.07/ .04	-.04/-.08	.03/ .04	-.12/ .07	0 / .04	.05/ .05	-.05/-.04	-.03/-.03	.03/ .01
Required	.01/ .09	.04/-.06	-.08/ .04	.06/-.03	-.04/-.09	0 / .07	-.03/-.11	.08/-.06	.02/ .02	-.03/-.05
Re-enter	-.01/ .02	.03/-.01	.11/ 0	-.03/ .03	.02/ .01	.06/-.03	-.03/ .03	.11/ .01	.07/-.02	.12/ .02
Absent	.10/ .04	-.03/ 0	.05/ .04	-.01/ .09	.04/ .02	-.04/-.06	.14/-.01	-.04/ .08	.02/ .05	.04/-.03

Elementary/Secondary

N = 606/798 teachers; 38/15 schools.

[1]Partial correlations for effects of student ability, SES, homogeneity, principal sex, principal experience and % female teachers yielded no meaningful variations from above correlations.

.05 and -.05. When partial correlations are run to separate out the effects of age, sex, number of children, teacher education, student ability, SES, principal sex and experience and teacher career plans, only a few correlations are changed by more than .05, and each of these changes involves only the effects of universalistic criteria of evaluation for secondary teachers. At the secondary level, controlling for teachers' education raises the correlation between UNIV and #TOs from .16 to .23; controlling for student ability raises the correlation between UNIV and Local Office holding to -.15; controlling for age reverses the weak correlation of UNIV with reading journals (from -.13 to .06) and of UNIV with time reading (from .06 to -.15).

None of the other controls have any noticeable effect on the correlations between organizational aspects and teacher dedication to work. Even those noticeable changes do not offer significant support for the propositions, since universalism was expected to encourage all types of teacher dedication to work. Furthermore, one also wonders why those particular controls affected the influence of use of universalistic criteria in schools. It makes some sense that universalism and age would have joint effects upon dedication, since age might easily be a basis for discrimination in schools relying upon particularistic criteria of evaluation. From that line of reasoning, one would also expect sex or family composition to interact with universalism, rather than extent of teacher education or student

ability levels, which do not suggest any basis for discrimination. Looking at the data from a different perspective, though, one might expect both teacher education and student ability to affect the appearance of teacher's success when universalistic standards of evaluation are used. From this perspective, it makes sense that education and student ability interact with universalism in affecting level of dedication, although the reason for a lack of interaction with sex or family composition as well as the failure of elementary school variables to show similar interactive effects remain unexplained.

Since Table 34 and further refinements of these data show the proposition that school structure determines level of dedication when occupation is controlled to be lacking in support, one must ask whether the revised proposition, that teachers' perception of work setting determines intra-occupational differences in dedication to work, receives any more support from the data than did the original structural proposition. Table 35 presents correlations between the several aspects of teacher perceptions of structure and dedication to work for both elementary and secondary teachers. Since perception of setting did prove to be a better predictor than structural variables when self-investment was the dependent variable, one might expect the same pattern to hold when dedication is the dependent variable. However, the data in Table 34 do not support that expectation, since there are only weak correlations between

TABLE 35.--Correlations Between Teacher Perceptions of Work Setting and Level of Dedication to Work, by Occupation.

	Perceptions of Setting								
Dedication	CoopOut	CoopIn	IdeaOut	IdeaIn	IdeaCol.	PoorAd.	PrinSup	TO-Hi	Influence
Active TO	.04/ .03	.09/ .04	.04/ .01	.02/ .04	.09/ .02	-.03/-.04	.04/ .04	-.02/-.01	.05/ .05
Local Ofc.	.04/ .08	-.03/ .03	.05/-.03	.02/ 0	-.02/ .02	-.04/-.05	.02/-.03	-.09/-.05	.03/-.01
State Ofc.	.04/-.02	-.04/ .07	0 / .03	-.04/-.01	-.02/ .03	0 / .03	0 /-.03	-.01/ 0	-.02/-.02
State Prog.	-.08/-.02	.01/ 0	.02/-.01	-.05/ .01	0 /-.01	-.02/-.02	.03/ 0	-.02/-.03	.03/-.05
# TOs	-.01/-.01	.08/ .11	.04/ .01	-.01/ 0	.08/ .05	-.02/-.05	-.01/-.04	.02/-.02	-.04/ .01
State Comm.	0 /-.01	.01/ .04	.10/-.01	-.02/ 0	.05/ .01	-.07/ .01	.07/ 0	-.04/ .01	-.02/-.02
Local Comm.	.01/-.01	0 / .02	.02/-.02	-.02/ .01	-.03/ .01	-.08/-.03	.02/-.04	-.06/-.05	-.05/-.03
Bldg. Rep.	.06/ .05	.02/-.01	.09/-.06	-.02/-.04	0 /-.01	-.09/-.03	.09/-.08	-.05/-.07	.03/-.03
Workshops	-.03/-.03	-.02/ .03	.01/ 0	.01/ .04	.08/ .05	-.03/ 0	-.01/-.02	.04/-.03	-.02/ .03
Books	-.11/ 0	.01/-.03	-.01/ .01	-.02/ .06	-.02/-.03	.02/ .01	-.03/-.03	0 /-.06	-.05/-.02
Journals	-.06/ .06	0 /-.01	.04/-.01	-.03/-.01	.02/-.01	-.05/-.04	.04/-.07	-.05/-.05	-.02/-.01
Time Read	-.01/ .09	.03/-.01	.06/ .03	0 / .02	.05/ .03	.08/ .03	.07/-.03	.13/-.04	.17/-.02
Courses	.01/-.03	-.01/-.01	-.01/ .05	-.01/ .03	0 / 0	.06/ .09	-.04/ .04	.05/ .06	.02/ .03
Required	.06/ 0	.03/ .03	.12/ .04	-.09/ .04	-.02/ .07	-.09/ .08	-.07/-.02	-.07/ .12	-.07/-.01
Re-enter	.03/ .02	-.01/ .03	0 / .06	.03/ .01	0 / .03	-.06/-.03	-.06/ .02	-.01/ .02	-.01/ 0
Absent	.02/-.01	-.01/ 0	.03/ .02	0 /-.03	.02/-.04	-.02/ .04	.02/ .01	-.02/ .01	0 /-.01

Elementary/Secondary

N = 606/798

the two sets of variables. Furthermore, when partial correlations were run to separate the effects of age, sex, number of children, teacher's education level, career plans, student ability and SES, none of these controls affect any of the original correlations by .05 or more, for either elementary or secondary teachers.

The unexpected data presented in Tables 34 and 35 do not offer any meaningful support for the proposition that school structure affects teacher dedication to work, either directly or through teacher perceptions of setting. Several interpretations can be made regarding this lack of support: it is possible that the propositions are wrong (although the initial support drawn from comparison of elementary and secondary schools and teacher behavior opposes that interpretation); it is possible that the variables supposedly measuring dedication are not valid indicators of dedication; finally, it is possible that the range of structural variation within the occupational categories is too narrow to be discriminated by teachers--although that explanation does not appear to be the case for the range of differences in perceptions of work setting, since we did observe that perceptions of setting significantly affected teachers' level of self-investment in work (Table 32).

Finally, turning to another possible indicator of dedication, in trying to predict teacher turnover rates, one might draw two different explanations of turnover from the original propositions. First, if it is true that

teachers have, on the average, lower self-investment in work and hence less concern for upward career movement than do principals, one might expect teacher turnover rates to depend largely on random or extraneous factors. However, one might also draw from the propositions the idea that some school organizational variables might play a role in determining turnover rates, since some teachers do evidence strong self-investment in work.

If the latter perspective is at all true, one would expect that higher scores on school hierarchy would predict lower teacher turnover, since those teachers interested in mobility would find hierarchical schools to offer more potential for such mobility. Furthermore, other bureaucratic features of schools, such as standardization, formalization, required expertise, specialization and the use of universalistic criteria of evaluation, might also be expected to depress teacher turnover rates if these features make the schools better places to carry out educational objectives. The most critical feature of school structure that I would expect to find linked to turnover rates is centralization of decision-making, which determines the autonomy teachers can exercise at work and probably affects even teachers lacking strong self-investment in work.

To test these ideas and, by implication, the original propositions, I checked the relationship between such structural variable plus student ability, SES and homogeneity and total teacher turnover rates for 1965-68. Schools with

less than 50 percent turnover were considered "low" in turnover; the 20 schools with turnover ranging from 50 to more than 100 percent were considered "high" in turnover. Table 36 presents Yule's Q coefficients for each pair of categories for the 53 schools in the sample. With only 15 secondary schools, it is not meaningful to calculate separate Q coefficients for elementary and secondary schools.

TABLE 36.--Organizational Characteristics Correlated with Teacher Turnover Rates.

School Characteristic	School Turnover Rates, 1965-68, N = 53
Hierarchy	-.86
Standardization	-.65
Formalization	-.58
Specialization by Subject	-.21
Specializaton--Major	-.34
Universalism	.39
Expertise	-.05
Centralizaton--Principal P.	.36
Centralization--Teacher Perc.	.60
Specialized Auxiliary Staff	-.12
Student SES	.25
Student Ability	.25
Student Homogeneity	-.03

Data presented in Table 36 offer fairly substantial support for the idea that school structure does affect teacher turnover rates. Particularly, school scores on hierarchy show a strong negative correlation with teacher turnover (although this relationship is complicated by the fact that secondary schools tended to have both high scores on hierarchy and low scores on turnover); a modern negative correlation is established between turnover and both standardization and formalization; teacher perceptions of centralization of schools are moderately and positively related to teacher turnover rates. Surprisingly, universalism in schools is positively related to teacher turnover, although the correlation is not strong. Yet another unexpected finding is that specialization (by subject, by major, presence of staff and expertise of teachers) does not have the strong negative effects on turnover that I had anticipated. Since Specialization by Subject and Expertise of teachers were not significantly related to school level (see Chapter V), the low correlations for these two variables, at least, cannot be attributed to some occupational variable. The best way to check the meaning of these low correlations would be to obtain turnover rates for teachers with high self-investment in work and for those with low self-investment and see whether specialization of various types has different effects within each group. Unfortunately, the data on teacher turnover concerns mainly

teachers who left before the survey was made, so that the characteristics of teachers who left are unknown.

Turning to the contextual variables, student ability and SES weakly encourage turnover while homogeneity of students appears unrelated to actual turnover rates.

On the whole, it appears that certain characteristics of school structure underly variations in school turnover rates, although the exact specification of the roles of occupational and organizational variables cannot be determined from this data.

Conclusion

This chapter tested the proposition that certain school organizational variables influence perceptions, behavior and attitudes of teachers. Confirmation of this proposition required that the data show significant and meaningful correlations between organizational elements and the dependent variables, when occupation and personal characteristics of the respondents are controlled. The explanatory power of two alternative explanations of worker behavior, involving personal/family characteristics and level of satisfaction with various aspects of work, was considered as well, so that the usefulness of the proposed explanation of work behavior could be compared with that of the major competing explanations.

In testing the propositions and the alternative explanations on worker behavior, the following conclusions were established:

1. Personal and family variables do not significantly affect teachers' level of self-investment in work and have only weak effects on non-union indicators of dedication, except for likelihood of taking non-required courses. When union activities are considered, age and experience positively correlate with history of union participation, probably reflecting the differences in opportunity of old and young workers to have such a history. My expectations that young and female workers would be more militaristic, because of lack of advancement opportunities through regular channels, was not supported.
2. Teachers' level of satisfaction with three aspects of work--physical, non-physical and authority relations--has no significant effects upon level of dedication to work but satisfaction with authority was mildly related to one indicator of self-investment. However the most plausible explanation of that phenomenon is that concern with intrinsic aspects of work leaves teachers inattentive to power problems, yielding a high score on satisfaction with authority.
3. The indicators of level of self-investment in work do not correlate internally enough to support the idea that each is a critical element of a

unidimensional variable, self-investment. Instead, three separate groups can be identified, although it is difficult to say if these dimensions are equally part of self-investment.

4. Contrary to expectations, none of the aspects of self-investment strongly correlate with any of indicators of level of dedication to work. When partial correlations are run to isolate the effects of personal and family variables, we see that collegial reference group have slightly more impact on dedication for teachers who are younger, have smaller families and/or fewer young children.
5. The original propositions suggested that teachers' perceptions of good and bad aspects of work setting would be determined by school structure. Correlations between each aspect of structure and each perceptual variable are very weak and offer no support for this idea. However, it is possible that the intra-level organizational variation is so narrow that teachers do not discriminate these fine differences. The proposition remains "not proven" rather than conclusively refuted because of that possibility.
6. The proposition linking favorable perception of work environment to level of self-investment in work is moderately supported for both occupational groups. However, school structure does not appear

to have any effects upon level of self-investment within occupational categories.

7. Neither school structure nor teachers' perceptions of the work climate meaningfully explain variations in teachers' level of dedication to work. At the secondary level only, controls on level of teachers' education raise the correlation between universalism in schools and the number of teacher unions a teacher joins to .23, the strongest relationship uncovered. Structure does influence turnover rates, although controls on level are lacking.

While the data presented in this chapter support only a few aspects of my propositions, two critical facts must be kept in mind: of the major alternative explanations of dedication and attachment to work, neither personal/family characteristics nor satisfaction with work better explained level of self-investment in work, compared to structural variables, while teachers' perception of structure proved to be the best predictor of self-investment; furthermore, comparing the three explanations of dedication, only age and experience of worker had significant effects and only upon historical aspects of dedication to work, not upon current behavior. Thus, while my propositions are not fully supported, the independent variables I expected to be critical fared no worse as predictors than did the competing explanations of variations in worker behavior and, in a few

cases, my perceptions of structure proved to be better predictors of teacher responses.

Finally, it is important to bear in mind that this chapter considered a very stringent set of tests of the propositions at issue, since occupational and organizational influences were separated, thereby wiping out most of the variation along organizational dimensions. If this stringent test of the propositions had yielded much support, one could have been quite certain that organizational dimensions are critical to worker behavior. As it stands, one can only say that the propositions were not confirmed. However, neither did we find any evidence that bureaucratization of schools discourages teachers from exhibiting self-investment in work or from behaving in a dedicated manner. Further research in which a broader range of organizations can be studied, holding occupation constant, is required in order to make any more conclusive statement about the status of the propositions.

CHAPTER VII

CHARACTERISTICS AND EFFECTS OF DISTRICT ORGANIZATION

The hypotheses regarding behavioral and perceptual responses to organizational setting require specification of different organizational settings for principals and teachers. Since teachers carry out most of their activity and interaction in individual schools, rarely moving into district administration, the effects of school organization upon teachers was expected to be more critical than the effects of district organization, although broad corrolaries of district variables will be considered later in this chapter.

When principals' perceptions and responses are under consideration, however, only occupational level and district organization are expected to affect them. School organization is of less importance than district organization in opportunity for advancement, for recognition and in interaction with close colleagues (other principals and assistant superintendents). Thus it is necessary to relate

the organization of the five school districts to the principal data.

Unfortunately, there are only five school districts in the sample and a great many ways in which these districts might be differentiated. In considering possible organizational differences at the district level, the following procedure was used: documentary sources of data were consulted and coded to yield a score for each district on each variable and then Spearman rho correlations were calculated between each pair of variables to ascertain patterns of district organization. Eventually, these patterns of organization will be related to those aspects of principals' perceptions and behavior that show statistically significant variations in a one-way analysis of variance where district is the independent variable.

Patterns in District Organization

The dimension usually considered most critical in determining level of bureaucratization is hierarchy, involving the number of levels of authority in an organization. From the propositions developed in the first chapters, I expect hierarchy to be of critical importance in explaining principal behavior, since the major element in the intra-district career possibilities open to principals is the number of higher positions in which vacancies might occur. Using criteria described in Chapter III, the number of "assistant superintendent" and "administrative

assistant" positions in each district organization were established. Table 37 presents the number of such positions in each district as well as the ratio of possible career moves to possible competitors (i.e., all principals) in each district.

TABLE 37.--Distribution and Mean Scores on System Hierarchy.

	Number of Positions			
District	Assistant Superintendent	Administrative Assistant	Ratio Prin. Positions	Rank
1	5	3	.267	1
2	3	2	.093	3
3	3	2	.048	5
4	4	2	.111	0
5	3	2	.077	4

From Table 37 we see that District 1 has more administrative positions between the principal and the superintendent and that the ratio of such positions to principals is highest in that district. Districts 3 and 5, with the lowest number of such positions also have the lowest ratio of administrators to principals. In terms of the original propositions, then, one would say that District 1 offers the best organizational advancement structure, while District 3 and 5 offer fewer possibilities

for principal promotion inside the district. There is no evidence regarding differences in opportunity for secondary and elementary principals, except that secondary principals probably have an advantage based on greater administrative experience because of the generally more complex administration of secondary schools.

Formalization of rules and procedures is another organizational variable that could be detected from documentary sources. Each of the 5 districts worked out teacher-district contracts for 1968. While each of the contracts included provisions specifying salary, school calendar, status of the teacher organizations and grievance procedures, the contracts differed along two main dimensions: the extent to which authority was explicitly granted or denied teachers in a number of disputed areas and the total number of provisions explicitly setting the locus of authority for various decisions and procedures in each district. Using these items as indicators of the formalization of authority relations, I gave each district a score on formalization corresponding to the number of separate contract provisions dealing with authority and autonomy. Separate analyses of the contract provisions were carried out by two coders. For the few items where interpretations of contract provisions differed, mutually satisfactory compromises in coding were reached. From this coding procedure, 55 limits on administrative or teacher decision-making and autonomy were identified. None of the districts had each

of the 55 provisions in its contract. Table 38 sets out the actual incidence of these items in each district.

TABLE 38.--Formalization of Authority Relations, by School District.

District	Number of Provisions on Authority	Rank: Formalization
1	.618	3
2	.636	2
3	.382	5
4	.582	4
5	.800	1

Looking at Table 38, one observes that District 5 has a much more formalized authority structure, Districts 1, 2 and 4 are similar and moderate in formalization while District 3 has the least concern with formalization, considerably lower than the others.

Data from the district handbooks and contracts did not suggest any major variation by district in adherence to universalistic criteria of evaluation, expertise of administrative staff or in standardization of procedures and content (all districts had standard texts and a set school calendar). While there may actually be variation on these dimensions, such variation could not be inferred from the district documents.

The provisions of teacher-district contracts did, however, suggest some differences in the centralization of authority in the 5 districts, independent of level of formalization. In coding the contract provisions regarding locus of authority and retention of autonomy, coders kept two tallies for each district: the number of provisions in each contract that explicitly limit the authority or autonomy of district officials and the number of provisions restricting the autonomy of teachers. In the contracts, principals appear as agents of the school board and superintendent, so the few cases of explicit restrictions on principals are considered equivalent to other restrictions on district authority. Table 39 sets out the number of restrictions of eacy type observed in each district contract, as well as the ratio of limits on administrators to limits on teachers that I use as an index of centralization. Using this ratio, rather than any simple measure of number of provisions, assures that level of formalization does not intrude on this measure of centralization.

When the substance of the contract provisions is at issue, other district differences appear. Some district contracts emphasize teacher professional autonomy, some are largely concerned with benefits, hours and security, while others strongly emphasize procedures to be followed in resolving conflicts. Each of these types of emphasis involves some restrictions on teachers, some on district

TABLE 39.--Constraints on Autonomy of Administration and Teachers, by School District.

District	Constraints on Teachers	On Administration	Ratio $\frac{T}{A}$	Rank: Centralization
1	10	24	.42	4
2	11	23	.48	3
3	8	14	.59	1
4	7	21	.33	5
5	11	21	.52	2

See Appendix E for a list of all 55 contract provisions.

officials. Table 40 sets out a ranking of the districts according to the number of provisions covering each content area.

TABLE 40.--Areas of Emphasis in District Contracts.

	District and Rank				
Area of Emphasis	1	2	3	4	5
Professional Autonomy	4	3	5	1.5	1.5
Benefits, Hours	1	3	5	4	2
Board Role	2.5	2.5	4	5	1
Safety, Security	1.5	4	5	3	1.5
Resolution of Conflict	1	5	3	4	2

From Table 40 one can observe considerable similarity between District 1 and District 5 on four of the five types of emphasis. District 3 seems to be consistently low on all dimensions, while Districts 2 and 4 put different emphases on professional autonomy and role of school board. These ranks are linked to total number of provisions in the contracts, showing that none of the districts devoted disproportionate attention to one area of emphasis on the neglect of other concerns. A few contract provisions could not easily be fitted into the five groups above, representing idiosyncratic but minor concerns of one district or another, such as limits on the length of meetings or

procedures the board must follow in making millage proposals. Despite these limitations, I expect that district ranks on areas of emphasis may correlate with district ranks on teachers' self investment and dedication levels.

The last organizational variable that could be ascertained from the district documents was the functional specialization of each district. All districts had central administration, a business division and elementary and secondary divisions. Despite these basic similarities, there was great variation in the number of separate departments of specialized staff headed by a coordinator or manager. The number of departments as well as the total number of professional staff members in these auxiliary professional departments are set out in Table 41. In determining the number of professional staff members, I used two criteria: some districts conventionally noted earned degrees for each staff member in the directory, so in these cases I counted all members of auxiliary departments who had at least a BA or BS after their names; besides this, in districts not reporting degrees, I coded as professional any member of an auxiliary department with a title like "nurse," "librarian," "specialist," "counselling," "testing," "researcher," etc. Basically, this technique eliminated clerical, janitorial and most cafeteria employees (except for dietitians) from the final determination of size of professional auxiliary staff.

TABLE 41.--Number of Departments and Size of Auxiliary Professional Staff, by District.

	District				
	1	2	3	4	5
Number of Departments	24	46	19	20	14
Rank	2	1	4	3	5
Size of Auxiliary Professional Staff	54	72	58	145	120
Rank	5	3	4	1	2

District 2 appears to have many more functional specialties but few professional staff members, while Districts 4 and 5 employ many auxiliary professional specialists but separate them into only a few departments. Fitting these data to the original propositions suggesting that specialization encourages self-investment in work and consequently high levels of dedication, one can only speculate about the relative importance of each of these aspects of specialization to principals and teachers in these districts. Presumably, specialization will make more difference to the members of these auxiliary staffs than to school personnel. However, if the ranks of these specialists are taken into account, the number of district level specialist positions may indicate promotional opportunities for teachers in the district. One would anticipate, then, a stronger positive effect of district specialization upon self-investment and dedication of teachers than of principals in the same district.

Interrelationships in District Structural Variables

The principles Weber used to describe the ideal type of bureaucratic organization, which were mildly supported in the school data, would lead one to expect two loose clusters of organizational variables at the district level as well. One group should consist of the various aspects of district centralization while the other should include hierarchy, specialization and formalization. Furthermore, one would expect student ability and SES to correlate strongly at the district level. The overall pattern of district organizational variation is set forth in Table 42, which shows Spearman rho correlations between District ranks on each of the structural and student aggregate variables.

In general, the predictions about organizational patterns are confirmed by the data. The three measures of centralization of authority in each district are strongly related, since the districts had identical ranks for principal and teacher perceptions of the centralization of decision-making. These perceptions are strongly, though not significantly, correlated with contractually derived ranks on centralization. Furthermore, the measures of centralization show weak positive and strong negative correlations with bureaucratic variables. However, the remaining organizational variables show only weak to moderate intercorrelations, possibly reflecting the crudity

TABLE 42.--Spearman Rho Correlations Among Organizational and Contractual District Variables.

	Hier.	Form.	Cent-C	Cent-P	Depts.	Staff	SES	Homog.	Ability
Hier.									
Form	.09								
Cent-C	-.93	.18							
Cent-P*	-.53	-.30	.72						
Depts.	.61	.18	-.53	.21					
Staff	-.08	.21	-.30	-.71	-.30				
SES	.72	-.60	-.68	.09	.35	-.41			
Homo.	-.72	-.41	.71	.24	-.62	.32	-.30		
Ability	.72	-.60	-.68	.09	.35	-.41	1.0	-.30	

*Principal and Teacher perceptions yielded consensus on relative ranks of Districts on centralization of decision-making.

For N = 5, if rho $\geq$ .90, significant at $\alpha \leq .10$.

of measurement of these variables. At least the data show that hierarchy, formalization and specialization have stronger positive intercorrelations than their correlations with centralization.

As expected, student ability and SES levels are significantly related, with districts having identical ranks on these variables. One interesting and unanticipated finding is the strong yet not significant correlation between contractual evidence of centralization and student homogeneity. Perhaps the recurrence of similar problems and the probable existence of community consensus about education encourage the standardization of problem-solving at the district level. In districts where students are very different and problems in teaching and administration are very different depending upon neighborhood characteristics, it may be much more difficult to handle anticipated problems at the district level. The greater diversity of students may encourage greater autonomy of principals and teachers in those districts.

Since the correlations among organizational elements approach statistical significance only in a few cases (although the trends that emerge are consistent with predictions based on Weber's exclusion of centralization from the list of elements of ideal bureaucracy further analysis of the effects of these variables will consider each organizational dimension separately.

Effects of District Organization Upon Principals

The first step in uncovering the relationships between district structure and principal reactions is to see whether or not there are any significant differences in principal perceptions and responses by school district. Accordingly, a one-way analysis of variance was run to check the importance of district identity as an independent variable. For those variables that show a significant district effect, I will then attempt to identify the specific components of overall district identity that are responsible for these patterns of district differences. Table 43 presents two sets of data: the results of the analysis of variance for the six principal variables that showed a significant district effect ($\leq .10$) and data on principal turnover in each district from 1967 to 1969, which were subjected to a Chi-Square test for significance.

The data in Table 43 present several interesting items of information. First, there are no significant district differences for most of the principal perceptual and behavioral clusters. Despite the many differences in district structure already established, these structural differences had no effect upon extent of idea exchange, cooperation with others, job satisfaction, perceived own influence, reference groups, career plans or turnover among the sampled principals. Although the turnover rates varied

TABLE 43.--District Variations in Principal Perceptions and Responses.

Variable Name	Significance Level*	Rank of Each District, on Significantly Different Items				
		1	2	3	4	5
Experience	>.10					
Workshops	>.10					
Exchange Up	>.10					
Exchange Down	>.10					
Exchange Collea.	>.10					
Import. Student	>.10					
Imp. Intrinsic	.098	1=Hi	5	3	2	4
Imp. Extrinsic	.007	1	2	3	4	5
Imp. Physical	>.10					
Satisfaction	>.10					
Poor Admin.	>.10					
T. Org. Interfere.	.039	5	2	3	1	4
Own Influence	>.10					
Coop. T. Org.	>.10					
Coop. Depts.	>.10					
Coop. Parents	>.10					
Coop. Outside	>.10					
Adeq. Own Auth.	.028	1	5	2	3	4

TABLE 43.--Continued.

Variable Name	Significance Level*	Rank of Each District, on Significantly Different Items				
		1	2	3	4	5
Imp. Opin. Teach	>.10					
Imp. Opin. Sup.	>.10					
Career Prin.	>.10					
Prob. Labor Rel.	>.10					
Community Critic.	.004	5	4	2	1	3
Plans	>.10					
Active Prin. Org.	.006	1	4	3	5	2
Turnover Rate	>.10					

*From Chi-Square test for turnover; AOV for other variables.

from 8 percent to 45 percent, even these apparently large differences were not statistically significant.

Second, for those variables that do show significant district effects, distinctive patterns in the data emerge. In District 1, principals show least concern for interference or criticism by the Teacher Organization or the community and report the greatest importance of both intrinsic and extrinsic aspects of work, believe their authority is adequate and are most active in the Principal Organization. That pattern is almost exactly reversed in District 4, where TO and community problems are greatest and where principals are inactive in their organization and see little importance in extrinsic aspects of work. Districts 3 and 2 have more moderate scores on all the variables, while District 5 is like District 1 in some ways.

Perhaps a better way of handling this data is to ask how much the principal variables interrelate, rather than labelling each district. Table 44 presents Spearman rho correlations for the district ranks on each of these variables, so that one can check the evidence pertaining to the proposition that favorable perceptions of the organization (such as greater adequacy of own authority, less TO interference, less community criticism) should produce greater levels of self-investment in work, suggested by the importance of intrinsic rather than extrinsic aspects of work and greater dedication to work, suggested by activity in principal organization mobility orientation.

TABLE 44.--Correlations Among District Ranks on Selected Principal Variables.

	Intrinsic	Extrinsic	TO Int.	Auth. Adeq.	Comm. Crit.	Prin. O	Turnover
Importance-Intrinsic	--						
Extrinsic	.29	--					
TO Interferes	-.30	-.30	--				
Auth. Adeq.	.94	.35	-.30	--			
Comm. Crit.	-.53	-.91	.61	.35	--		
Active Prin. O.	.29	.38	-.91	.49	-.72	--	
3-Yr. Turnover	.77	-.09	.22	.71	.40	-.22	--

For N = 5, α is significant at .10 if rho $\geq$.90.

The only statistically significant positive correlation presented in Table 44 is that between principal perception of adequacy of own authority and importance of intrinsic aspects of work, which provides some support for the proposition that favorable perceptions of the organization induce greater self-investment in work. Furthermore, importance of intrinsic aspects of work and perceived adequacy of authority were also strongly, though not significantly, related to principal turnover rates. For this sample, it appears that favorable organizational climate and high self-investment in work produce higher turnover rates among principals than do negative aspects of the organizational setting. Unfavorable settings, here indicated by community criticism and interference by teacher organizations, do not lead to significant principal turnover (or escape) while favorable organizational features not only produce greater self-investment but also more mobility, suggesting that these principals are not escaping from a bad situation but more probably, maximizing important rewards through job mobility.

Looking at the other predicted patterns, perceived adequacy of authority is the best single predictor of greater activity in principal organizations, followed by importance of extrinsic, then intrinsic, aspects of work. This mild confirmation of my propositions runs counter to another possible explanation of principals' concern with their principal organizations, that unfavorable aspects of

work settings leads to such concern. On the contrary, we see that difficulties with teacher organizations and level of community criticism greatly decrease principal to involvement in principal in principal organizations.

It is important to distinguish here between principal perceptions of organizational support or problems and other evidence regarding organizational structure, in assessing the true importance of structure and of perceptions of structure upon principal responses. The original propositions suggest that self-investment in work, here shown by the importance of intrinsic aspects of work, and dedication to work, suggested by activity in principal organization and district turnover rate, should be higher in districts that score higher on hierarchy, formalization, and specialization and that have lower scores on centralization of authority. Student ability and SES might also exert an independent effect upon principal self-investment and dedication. Furthermore, perceived adequacy of own authority should be related to lower centralization in the decision-making structure of the district. The pattern of relationships between organizational variables and these intervening and dependent variables is set forth in Table 45, which shows the Spearman rho correlations between each set of variables, based upon the district ranks on each variable.

The data in Table 45 present some interesting surprises. First, although hierarchy, the best single

TABLE 45.--Correlations Between Organizational Factors and Principal Variables.

	Principal Responses						
	Imp. Intrinsic	Imp. Extrinsic	TO Interf.	Adeq. Auth.	Comm. Crit.	Active P.O.	Prin. Turnover
Hierarchy	.61	.49	-.08	.28	-.30	.09	.18
Formalization	-.53	-.21	-.30	-.67	-.08	.28	-.93
Centraliz-Contr.	-.30	-.21	-.30	.09	-.08	.28	.09
Centraliz-Percep.	-.30	.49	-.21	.28	-.39	.35	.49
# Depts.	.18	.82	.21	-.08	-.67	-.21	.09
Size Staff	-.30	-.37	.72	-.94	.94	-.71	-.67
Homogeneity	-.23	-.69	.32	-.30	.72	-.30	.22
Ability	.94	.61	-.08	.82	.35	.09	.72
SES	.94	.61	-.08	.82	.35	.09	.72

For N = 5, α is significant at $\leq .10$ level if rho $\geq .90$.

indicator of level of bureaucratization, is moderately and positively related to degree of emphasis principals put on the intrinsic aspects of work, none of the other purely organizational variables correlates much with level of importance of intrinsic factors. Only one organizational factor, number of specialist departments, moderately correlates with principals' expressed emphasis on extrinsic aspects of works and this correlation neither supports nor challenges the propositions, except in that I had anticipated that each aspect of bureaucratization would encourage importance of intrinsic rather than extrinsic factors of work. That does not appear to be the case, except for a slight difference according to district rank on hierarchy.

The propositions are futher challenged by the fact that level of activity in principal organization and principal turnover rates do not show the expected strong correlations with organizational features. Except for a strong negative correlation between district formalization and principal turnover, it appears that organizational variables have little impact on these two measures of principal dedication.

A final set of unexpected results concerns the effects of size of district auxiliary staff, which shows a negative correlation with adequacy of principal authority and a significant positive correlation with principal awareness of community criticism. It is possible that the auxiliary professionals, mostly experts in some curricular

field, are felt by principals to have too much influence over the programs and procedures of the district and to compete with principals for the attention of teachers. It is also possible that the community may be critical of the expense such large staffs require, or the types of programs such staff members initiate. Using cross-sectional data, however, it is impossible to rule out the chance that community problems that produce criticism of schools also produce greater district efforts, in the form of larger staffs of consultants and advisors trying to correct these problems.

Turning to the effects of contextual variables, student ability and SES are significantly related to principal emphasis on intrinsic aspects of work and moderately related to perceptions that principal's own authority is adequate, suggesting that principals find student composition to be an important part of their work climate. Furthermore SES and student ability are moderately related to principsls' turnover rate, further indicating that students may affect principals' dedication and career orientation. An alternative explanation must also be considered--officials in higher SES districts may renew fewer principal contracts and may require more evidence of high self-investment in work as a condition of contract renewal. Since the data do not distinguish voluntary from involuntary job turnover, it is impossible to confirm either explanation.

Finally, student homogeneity is moderately related to principal perceptions of community criticism, perhaps because more homogeneous communities presenting one consistent brand of criticism are more effective in presenting these items of criticism. However, the repercussions of student contextual variables will not be considered in more detail since they do not directly bear on the propositions at hand. It is possible, though, that contextual variables have affected the development of district structure and patterns.

Of the many non-organizational factors differentiating the five districts, two critical aspects of district history appear to be most relevant to a discussion of teacher reactions and behavior. When this survey was conducted, collective bargaining for teachers was a new phenomenon and there was competition between two unions to see which would represent teachers in each district. Four of the districts studied were represented in collective bargaining by locals of the Michigan Educational Association, which played the role of a professional association rather than a traditional union. Teachers in District 1, however, had voted to be represented by the Michigan Federation of Teachers, a branch of the AFL-CIO, which held a more traditional, trade-unionist approach to bargaining.

Along with these differences in representation, the five districts varied greatly in the amount of conflict associated with contract negotiations completed just prior

to the survey. District 1 had experienced a lengthy strike, District 5 a short strike, District 3 had no strike but very difficult negotiations, while District 4 had fewer problems and negotiations were easiest in District 2.

While the effects of such differences in the history of collective bargaining in the 5 districts are beyond the scope of the present research project, it is important to recognize that these and other district contextual differences may be responsible for the observed differences in contract emphases and may have effects on teacher and principal perceptions and behavior.

In summing up the status of the original propositions, taking into account this set of data on district organization and principal responses it is only possible to say that bureaucratization at the district level does not significantly discourage principal self-investment and dedication but there is no significant evidence that bureaucratization encourages these positive principal responses. However, student SES and ability levels do significantly correlate with indices of self-investment in work and both are strongly related to perceived adequacy of principal authority and to principal turnover rates. Thus, any further research on principal behavior should consider propositions linking student contextual variables to principal behavior and should distinguish voluntary and involuntary turnover.

Effects of District Organization Upon Teachers

Although the school organization's characteristics are presumed to be most critical to teacher behavior, it is conceivable that district organization may affect teachers both directly and through limits on school organization. For instance, the auxiliary professional staffs at the district level are composed of specialists in curricular areas, many of whom began their careers as teachers. Hence, the teachers in a given district may see these positions not only as potential aids for planning and evaluating programs but also as potentials for upward career movement. Other aspects of district organization may affect teacher behavior as well, affecting possibilities for cooperation, idea exchange and importance of various reference groups.

In fact, when the perceptual variables are subjected to analysis of variance to check the independent effects of district, thirteen of the 21 variables show a strong district effect, as Table 46 shows.

Table 46 shows that, despite my expectation that school level and organizational characteristics would be most important in explaining variations in teacher responses, some dimensions of district organization must be responsible for the significant district effects shown for thirteen of the teacher perceptual and response variables.

Those teacher variables that showed a significant district effect must be further analyzed, to see which

TABLE 46.--Effects of District Upon Teacher Variables.

Variable	Significance of F for District Effects*
Importance of Extrinsic Aspects	.0001
Importance of Status	>.10
Importance of Intrinsic Aspects	>.10
Cooperate Outside School	.06
Cooperate Inside School	.01
Exchange Ideas with Outsiders	.06
Exchange Ideas with Insiders	>.10
Exchange with Close Colleagues	.01
Satisfaction--Physical Aspects	.0001
Satisfaction--Non-Physical	.0001
Satisfaction--Relations with Superiors	>.10
Poor Administration	>.10
Principal Supports Teachers	.0001
Teacher Org. Hinders Teachers	.0001
Own Influence	>.10
Reference Group: Close Teachers	.06
Reference: Superiors	.002
Reference: Friends Outside Education	>.10
Adequacy of Principal Authority	.0003
Career Hopes--Teaching Level	.003
Career Hopes--Administration	>.10

*Part of a 2-way Friedman Analysis of Variance checking the independent effects of district and school level. Data on effects of level is in Tables 18-23.

specific features of district organization can be isolated as probable reasons for these strong district differences. Recalling the original propositions, I expect that hierarchy, formalization and specialization will encourage self-investment in work, indicated here by reliance on colleagues rather than superiors as reference persons, by providing a more professional climate (one in which principals support teachers, cooperation is high, teachers and administrators exchange ideas and principal authority is considered adequate). Furthermore, more bureaucratic districts should, from the propositions, encourage stronger career orientations on the part of teachers, with the typical low mobility teaching career characteristic only of the less bureaucratized districts. Since centralization of authority is a non-bureaucratic form of organization, offering few advantages for professional employees, low centralization should be related to each of the anticipated effects of bureaucratized structure.

Emphases displayed in teacher contract provisions should bear out individual teachers' perceptions of problems in their districts. Thus bureaucratic districts should permit more emphasis on protection of professional autonomy while less bureaucratic districts should display more concern with benefits, safety and other extrinsic aspects of work, since those districts do not encourage a strong professional orientation on the part of teachers, according to the propositions.

To test these expectations with the available data, districts were ranked on the mean teacher responses for each of the thirteen significantly different teacher variables. Each set of rankings on teacher responses was then apired with each rank on district characteristics so that Spearman rho correlations could be calculated. These correlations between organizational characteristics, contract provisions and teacher responses are presented in Table 47.

The correlations presented in Table 47 offer several interesting confirmations and contradictions to the propositions in question. First, there is only moderate evidence that more bureaucratized districts encourage greater reliance on professional or collegial reference groups. Although the correlations of reference group use with both hierarchy and number of departments suggest some support for greater reliance on colleagues than superiors, staff size and formalization, as well as centralization, appear to discourage relative importance of colleagues as reference group. These trends, though not statistically significant, suggest that district specialization does not greatly encourage teacher self-investment in work (indicated by choice of reference group). The correlations with size of staff might be interpreted in another fashion, though, as indication of the importance of a reference group composed of superiors who are experts in curricular fields, hence colleagues.

TABLE 47.--Correlations Between District Characteristics and Significant Teacher Variables.

	Teacher Variables													
District	Extr.	CoopO	CoopI	ExchO	ExchT	Phy Sat	Non phy	Pri Sup	TO Int	RefT	RefS	Pri Aut	TOar	Turnover
Hier.	.30	.30	-.09	.98	-.23	.73	.93	1.0	-.58	.60	-.82	-.18	-.95	-.15
Form.	.60	.60	-.30	.08	-.41	.18	0	.09	.72	-.51	.09	-.42	-.09	-.68
CentC	.09	.09	-.30	-.93	.09	-.80	-.95	-.93	.72	-.51	.21	-.18	.94	-.18
CentP	.09	.09	-.23	-.57	.60	-.61	-.93	-.89	.30	-.30	-.09	-.14	.49	.18
#Depts	.09	.09	.27	.59	.41	.18	.49	.60	-.30	0	-.93	.08	-.58	.08
StfSze	-.58	-.58	.72	.12	-.09	.22	.30	-.09	0	-.30	.49	.86	.09	.47
SES	0	0	-.09	.86	-	.59	.46	.72	-.93	.94	-.93	-.93	-.70	.22
Homog	-.61	-.61	.22	-.61	.12	.16	-.53	-.80	.12	-.17	.84	.57	.84	.22
Abil.	0	0	-.09	.86	0	.59	.46	.72	-.93	.94	-.93	-.93	-.70	.22
Contract:														
Prof.	-.14	-.14	.22	.22	-.37	.57	.86	.40	-.16	.01	.33	.30	.01	.08
Benef.	.94	.94	-.70	.16	-.58	.33	.30	.60	.21	.21	.16	-.80	.58	-.83
BoAuth.	.84	.84	-.61	-.17	-.42	-.21	-.33	-.07	.84	-.84	.16	-.68	.12	-.83
Safety	.86	.86	-.53	.73	-.83	.65	.22	.59	.08	.22	-.28	-.55	-.53	-.27
Confl.	.72	.72	-.93	.08	-.82	.33	-.09	.60	0	.60	0	-.80	-.23	-.61

For N = 5, α is significant at $\leq .10$, if rho $\geq .90$.

The most surprising data concern the strong relationship between both SES and student ability and the relative importance of colleagues rather than superiors. It is possible that districts with high SES, high ability students attract more expert teachers who bring with them a strong interest in colleague ideas and opinions but it is also possible that student composition exerts some independent effect upon teachers, whatever their backgrounds. These rival explanations cannot be tested with the available data since the small N for districts makes it impossible to consider more than one possible source of variation at a time.

Leaving for the moment the effects of district organization upon teachers' choice of reference group, let us turn to a consideration of the effects of district variables upon dedication to work, and importance of work even though the role of the hypothetical intervening variable cannot be completely determined. The original propositions suggested that the more bureaucratic the work structure, the greater the employees' dedication to work. The rationale for this proposition was the belief that bureaucratic structures offer more opportunity for advancement, more autonomy and support from superiors, more opportunity for observation by close colleagues and as a further consequence, a different, less anti-professional role for the teacher union to play. The data in Table 46 show that district hierarchy significantly encourages exchanges outside

schools, satisfaction with non-physical aspects of work and greater principal support for teachers. Furthermore, in more hierarchical districts, teacher organizations are not seen by teachers as significant hindrances to professional objectives of educators.

Not all the indicators of bureaucratization have such positive effects upon teachers, however. Contrary to the propositions, formalization does not significantly correlate with any of the variables, though it shows a surprisingly strong relationship with teacher perceptions of their unions as hindering educatinal objectives. Number of specialized departments and size of auxiliary professional staff show only weak and insignificant correlations with perceptions of work climate, level of self-investment in work and teacher dedication. Size of staff is strongly related to teacher perceptions that principals had adequate authority, however, supporting the original propositions.

On the whole, the correlations between each aspect of district centralization and teacher perceptions of the character of relationships and problems in the districts support the propositions I offered. Table 46 shows us significant negative correlations between centralization and principal support of teachers, and a moderate but insignificant correlation between centralization and teachers' perceptions that the teacher organization hinders teachers. Highly centralized districts are characterized by little idea exchange between teachers and others

outside their schools, little satisfaction with physical or non-physical aspects of work and little reliance upon collegial reference groups. These results were predicted by the propositions, where centralization appeared as an alternative to bureaucratization and centralization was expected to produce an unprofessional work setting.

The strongest support for the propositions being tested comes from the data concerning teachers' career plans. Only centralization of authority is strongly and positively related to planned immobility (i.e., plans to remain in teaching with no upward movement). District scores on hierarchy and number of specialized departments seem to encourage teachers to plan upward career movement, as the propositions predicted. It is interesting to note here that the only other variable significantly encouraging immobility is student homogeneity. Presumably, when students are very similar, the problems teachers face are more predictable hence less threatening, perhaps encouraging teachers to remain in a stable and predictable environment.

When data on actual teacher turnover are considered, though, one realizes that none of the district variables significantly affects actual turnover. It must be remembered that not all such turnover is voluntary, since probationary teachers are not necessarily granted tenure and since mandatory retirement and maternity leaves might account for some of the observed turnover in each district. However, the teacher turnover rates probably have a higher

component of voluntary turnover than do the principal rates, since principals have only two year contracts.

Turning to the relationships between observed areas of emphasis in teacher contracts and district ranks on teacher response variables, Table 46 shows us, not unexpectedly, that teachers' expressed concern for extrinsic aspects of work is strongly correlated with contract emphasis on benefits, on safety and on retention of board authority. Another unsurprising strong correlation pairs contract emphasis on professional aspects of work and expressed teacher satisfaction with non-physical aspects of work. Contrary to expectations, there are no significant correlations between contract emphasis on professionalism and either use of colleagues as important reference group, or extent of idea exchange with close teachers.

Extent of contract emphasis on retention of rights of the school board shows a strong positive correlation with teacher perception that teacher organizations hinder educational concerns, a rather intriguing finding. It is possible that the struggle between conservative school boards and aggressive teacher organizations requires the teacher unions to ask more of teachers. Unfortunately, the cross-sectional data cannot tell us whether teacher organizations are forced to use more aggressive tactics by resistant boards or whether school boards take tougher positions when threatened by aggressive teacher organizations.

Not all the correlations from Table 47 are so easily explained. For instance, teacher perception of cooperation with those outside own school building is significantly correlated to three kinds of contract emphasis: benefits, board rights and safety. Perhaps cooperation is possible between teachers and district officials when these extrinsic aspects of school and district activity are at issue, producing consensus in the form of contract provisions on these items. When intrinsic aspects of work, such as limits on professional autonomy in conducting courses, rights to privacy and appeal for punishments, etc. are at issue, there may be less agreement that these constitute appropriate areas for bargaining. Thus, teachers concerned with professional rights and autonomy may find cooperation with district officials much more difficult both for contract negotiations and for everyday problem-solving. Emphasis on typical union bargaining areas like benefits and safety is more in line with administrative perceptions of what issues are negotiable, hence contributing to cooperative interaction within the district. However, the absence of strong collegial reference groups undermines this interpretation somewhat.

Considering all the aspects of district organization and their effects upon teacher perceptions, the data provide mild support for the propositions that more bureaucratic structures provide favorable environments for professionals, hence encourage self-investment and probably dedication to work. Looking at the array of significantly different

teacher responses, only 3 of the 14 areas showing strong district effects cannot be partially explained using one or more of the district characteristics identified in this study. Idea exchange with close teachers, satisfaction with physical aspects of work and actual turnover rates are not significantly related to any of the district characteristics studied. Even if we treat the data regarding emphases in contract provisions with special caution, since these could most plausibly be considered either dependent or independent variables since contract contents change every year, these differences in contract provisios were the sole significant correlates of only three teacher variables: importance of extrinsic aspects of work, and cooperation outside and inside school, none of which are central to the propositions being tested. The eight most important sets of teacher variables can be at least partially attributed to structural and compositional district characteristics, more enduring than contract provisions and more likely to independently affect teacher variables.

But do district structural characteristics have similar effects on teachers' dedication? Table 48 presents correlations between structure and those indicators of dedication showing a strong overall district effect.

The data presented in Table 48 show that district structure appears to be more important in explaining teacher behavior than I had originally anticipated. I had expected bureaucratization at the district level to have

TABLE 48.--Correlations Between District Characteristics and Teachers' Dedication to Work.

	District Characteristics											
Dedication:	Hier.	Form.	Cent	#Dept	StfSz	SES*	Homog.	ProfA	Benef	BoaAu	Safety	Conflict
Active To	-.30	.50	.50	-.50	-.40	-.30	.12	-.08	.60	.83	.58	.80
Local Ofc.	-.10	.20	.30	-.70	-.20	-.10	-.02	.08	.50	.58	.68	.90
State Prog.	.70	-.10	-.60	-.10	-.10	.70	.37	.17	.50	-.08	.72	.70
# TOs	-.10	-.20	-.20	.70	.70	0	-.52	.58	-.30	-.32	.32	.55
Local Comm	-.10	.20	-.30	-.30	1.00	-.40	-.32	.88	.30	-.17	-.22	-.50
Bldg Rep	-.50	.20	.20	-.80	.80	-.60	-.62	.68	-.30	.08	.12	-.10
Conferences	.30	.40	-.60	-.10	.90	-.20	.08	.98	-.30	-.02	.43	-.30
Books	.90	.20	-.80	.20	0	.60	.68	.37	.10	.08	.83	.50
Journals	.70	.50	-.50	0	-.10	.30	.68	.37	.70	.48	.98	.70
Time Read	.90	-.30	-.80	.70	-.30	.90	.68	-.12	.90	-.38	.32	.10
Courses	.05	-.25	-.25	.50	.50	.05	-.08	.32	-.35	-.52	-.52	-.85
Non-Required	-.60	.70	.70	-.30	0	-.90	-.08	.12	.20	.83	.08	0
ReEnter	-.20	-.90	.10	-.40	-.10	.50	-.58	-.38	-.60	-.77	-.32	.20
Absent	.50	-.20	-.20	.80	-.80	.60	.68	-.62	.30	-.02	-.08	.10

*Correlations for SES and for Abil are identical.

For N = 5 districts, is significant at $\leq$ .10 if rho $\geq$ .90.

only weak effects on teacher dedication, though in the same direction as the anticipated effects of school organization. It is interesting that district organization appears to be related to the variation in teacher dedication more than school organization appeared to be and in a manner that largely supports the ideas, if not the form, of my propositions.

For instance, looking at Table 48 one notes that district ranks on hierarchy are strongly and positively correlated with district means on number of books read, time spent reading for work, taking non-required courses and participating in state programs. Furthermore, number of specialist departments also moderately correlates with time reading and size of auxiliary staff positively correlates with several indicators of dedication--committee work, building representation, attendance at conferences and membership in many teacher organizations--while negatively correlating with absenteeism. Further confirmation of my ideas about the effects of structural variables upon workers is apparent in the very different effects of centralization of authority, which is negatively related to participation in state programs, attending conferences, reading books, time spent reading and enrollment in only required courses.

The only observations that strongly contradict my expectations are the negative correlations between district formalization and teacher willingness to re-enter education and the positive correlation between number of specialist

departments and days absent, as well as the overall depressing effect of number of departments upon teacher participation in union activities. However, since the implications for teachers of district specialization are not immediately apparent, these apparent contradictions are less interesting to me than the unexpected strong support for the notion that bureaucratization encourages teacher dedication detailed in the last paragraph.

Turning to the other district characteristics, it is interesting to note that SES and student ability appear to encourage teachers to spend more time reading and to take courses other than those required by their contracts, although these two variables do not encourage any union activity except for participation in state programs.

When the areas of contract emphasis are related to teacher dedication, several interesting patterns emerge. First, emphasis on professional autonomy is strongly related to participation in union activities and at conferences and to low absenteeism, but not to any evidence of truly professional dedication. On the contrary, one sees that the best contractual predictor of time reading is emphasis on benefits, while emphasis on safety and on conflict also positively correlate with reading books and journals and taking courses not required by contract. Emphases on safety and conflict resolution appear to predominate in districts where teachers are active in union activities other than local committee or representative work. Once

again, the correlations on teacher behavior and contract emphases cannot be interpreted causally, since both may undergo major changes from year to year and since correlational data alone cannot suggest direction of relationships.

In summary, the proposition that bureaucratic forms of organization encourage dedication to work received surprisingly strong confirmation from data on district characteristics, although not all supportive evidence met the criteria of statistical significance for the small number of districts. Since each district had approximately the same percentage of secondary teachers, compared to elementary teachers, these effects cannot be attributed to occupational differences but appear to reflect a genuine reaction to structural differences.

Conclusion

Data on the structure and effects of other aspects of district organization mildly confirm the propositions of this study. As expected, the measures of centralization were moderately correlated but were only weakly related to other organizational dimensions. However, hierarchy, formalization and specialization showed only weak and inconsistent intercorrelation, offering no adequate basis for choosing between the models of bureaucratization other writers have propounded (see Chapter II for summary).

As the data on schools led us to expect, district scores on SES and ability of students were significantly

correlated and showed little correlation with homogeneity of students.

The observed variations in district structure seem to have only a few important effects on principal perceptions and responses. While bureaucratization at the district level does not appear to discourage principals' self-investment and dedication to work, there is no significant evidence that it encourages these responses, although the data suggest moderate tendencies in that direction. Student composition variables seem to play a more important role in predicting principal responses than was anticipated, since SES and ability levels of students correlated strongly with indicators of principals' mean levels of self-investment and dedication.

Surprisingly, the district variables appear to be more critical in explaining significant differences in teacher responses across districts than in explaining principal differences. Particularly, hierarchy at the district level affects teachers more than principals, contrary to my expectations. Although not all the evidence is statistically significant, data on district effects upon teachers offer somewhat more support for the propositions relating bureaucratization to high self-investment and dedication than did the principal data.

Considering the role various district characteristics appear to play in explaining variations in teacher responses, district hierarchy appears to be the most

significant single element, strongly correlating with three sets of teacher responses that indicate that teachers in more hierarchical districts find more support for self-investment and dedication to work. Since hierarchy is often considered the best single indicator of level of bureaucratization (see Hall, 1967), this set of data must be considered to at least moderately support the propositions in question. For teachers as well as for principals, though, SES and ability of students, which are related to hierarchy, appear to encourage self-investment in work, evidenced by greater reliance on close colleagues as a reference group for teachers.

Data concerning possible causes and effects of teacher contract emphasis showed that districts where teachers cooperated with outsiders and expressed concern with extrinsic aspects of work produced contracts emphasizing extrinsic aspects of work. Contracts emphasizing professionalism occurred in districts where teachers derived great satisfaction from non-physical aspects of work.

Less purposive career orientations of teachers predominated in districts higher in centralization of authority, as my propositions predicted, although actual turnover rates could not be attributed to any organizational variables.

On the whole, the data on district structure and effects provide moderate support for the propositions that bureaucratization encourages self-investment and dedication

by providing a favorable environment for professional employees. Since several aspects of organizational structure could not be considered, due to limitations in the data making differentiation of districts impossible, it is encouraging to find that the few variables that could be measured yielded some confirmation of the propositions.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Introduction

This chapter summarizes the theoretical background of the research, describes the current status of the tested propositions and offers some conclusions about the contributions, limitations and implications of this research project.

This dissertation weighed the impact of several organizational variables--hierarchy, specialization, centralization, formalization and universalism--upon teachers' and principals' dedication to work, as well as separating out the effects of structural variables represented by occupational titles upon the reactions and behavior of this sample. Furthermore, I attempted to clarify the relationship between dedication behavior and two characteristics of professionalism, here considered indicators of self-investment in work (relative importance of intrinsic aspects of work and worker reliance on collegial reference groups). Finally, this project compared the relative importance of structural variables versus individual variables

like age and sex in order to distinguish the role each factor plays in explaining dedication to work, self-investment and job-leaving of teachers and principals.

As a basic step in accomplishing these objectives, the project also investigated the interrelationships between bureaucratic elements and rational elements in formal organizations, providing new information in an area of major concern to students of bureaucracy. This explication of the patterns of organization in public schools also makes an important contribution to a neglected area of educational research.

Theoretical Background of the Research

To reiterate the rationale for these research activities, I will summarize the basic arguments presented in Chapter I and II:

1. Previous studies of worker behavior have failed to explain bases for behavior variations of workers except as a function of hierarchical differences.
2. Particularly, research on job satisfaction as a determinant of behavior has produced no adequate, consistent explanation of worker behavior. Not only that, but job satisfaction hypotheses do not clearly link behavior at work to any accepted social-psychological explanation of human behavior in general.

3. Faunce, Vroom and Dubin each contributed to a more promising approach to understanding variations in worker behavior. Basically, they suggested that job conditions will greatly affect behavior only if workers see their occupational roles as very critical to self-esteem or ego. Those workers to whom the job is an unimportant necessity of life will be unwilling to devote more than minimum time or energy to work, regardless of extrinsic inducements or managerial warmth.
4. Finally, my extension of these ideas focused on the importance of structural (occupational and organizational) determinants of probably worker self-investment and consequent dedication to work. I expected that structural factors would be more important than personal or family characteristics of workers and also more important than reported level of job satisfaction in predicting behavior at work.

Definitions of the key concepts and specification of the general propositions plus adaptations to the case of public education follow.

General Propositions

Definitions

A. Self-investment: a process through which the degree of importance of social encounters upon

self esteem becomes differentially distributed among social roles (see Faunce, 1972). Indicators of area of self-investment include use of various standards of performance, use of various reference groups.

B. Rewards: intrinsic or extrinsically derived gains from activity, perceived by individual to be contingent on own behavior, within limits imposed by structure (such as rules).

C. Dedication to work: efforts to perform the work role well. "Well" is determined subjectively, based upon reference group standards. Indicators include low absenteeism, preparation for work in free time, extra time and attention devoted to work (or improving work situation) beyond that formally required for employment.

D. Purposive mobility orientation: Career planning strategy aimed at moves to more rewarding jobs; random, geographic and affiliative factors are unimportant in decision to quit or stay.

Propositions

Given that an individual believes rewards crucial to self-esteem are contingent upon own efforts, then

1. ↑perceived potential for reward at work→ ↑self-investment in work.

2. ↑self-investment in work→ ↑P (dedication to work roles).
   a. ↑perceived potential for reward at work→ ↑P (dedication to work).
3. ↑dedication to work→ ↑P (decision to quit is based on mobility orientation).
   a. ↑self-investment to work→ ↑P (decision to quit based on mobility orientation).
   b. ↑perceived potential for reward at work→ ↑P (decision to quit is based on mobility orientation).
4. If occupational and/or organizational structure make purposive career orientation impossible to achieve (or to continue achieving), ↑self-investment in work→ ↑attempt to change structure of work (such as through unionization).

Thus attempts to change structure may be equivalent to dedication activity. Furthermore, it appears that perceived potential for reward at work includes perceptions regarding likely success of attempts to change structure. Thus,

   a. ↑perceived success of change efforts→ ↑p (continued self-investment in work).

Adaptation of the General Propositions to the Case of Public Education

Given the evidence regarding references in opportunity structure among the occupations in public education, the general propositions lead us to expect that:

1. In general, the occupation of school principal offers more rewards than does the occupation of school teacher. (Principals have more autonomy, more scope for decision-making, less routinized work, earn higher salaries, receive greater status in the community, have later career ceilings and are more visible to collegial and organizational evaluators than are teachers.)
2. In general, occupations at the secondary level offer more rewards than occupations at the elementary level. (Greater specialization at the secondary level permits concentration of energy in areas of expertise, making work more interesting and allowing the recognized expert more freedom from parental interference or organizational rules on course content; the possibility of later career ceilings and expert peer audiences become important in departmentalized schools. The prestige of secondary personnel is higher than that of elementary, the "clients" of secondary personnel have higher social status, and the activities of secondary

schools are usually the subject of community, not just neighborhood interest, making the performance of secondary teachers and principals more visible.)

   a. Thus, ceteris paribus, principals should have higher levels of self-investment in work and behave in a more dedicated manner than teachers. Secondary personnel should have higher self-investment in work than elementary personnel and should behave in a more dedicated manner than elementary personnel.

3. Within each occupational category, variations in organizational structure should have noticeable effects on self-investment levels and dedication to work. Personnel in schools with more hierarchical levels, greater division of labor, greater expertise of employees, greater emphasis on universalistic standards of evaluation and permitting decision-making at the level of appropriate expertise should exhibit greater self-investment in work and greater dedication, behaviorally, than do their counterparts in other schools.

4. Sex and age of worker may affect perceptions of reward structure because of societal discrimination against older and female workers. The relative importance of sex and age of worker,

compared to structural variables, will decline in school offering evidence that older and female workers can achieve career success.

5. Principals should exhibit a more purposive mobility orientation than teachers; secondary personnel should have stronger mobility orientation than elementary staff.

Research Evidence Bearing Upon the Propositions

The next step in this chapter is to evaluate the propositions in the light of the data presented in Chapters IV, V, VI, and VII. Table 49 presents a summary of the evidence that was required to test each propositions and the status of each tested proposition.

In general, it appears that the propositions concerning the effects of occupational differences in reward structure were largely confirmed by the data on mean self-investment and dedication levels of elementary and secondary teachers and principals. These differences could not be attributed to differences in age, experience or educational background of respondents and, although secondary personnel had a lower proposition of females than did elementary occupations, the predominantly female elementary principals exhibited higher mean self-investment and dedication than the predominantly male secondary teachers. Contradicting my expectations, though, these respondents did not perceive the organizational dimensions of reward

TABLE 49.--Status of Propositions Tested in Previous Chapters.

General or Adapted Proposition.	Data Required for Confirmation	Source and Extent of Support for Proposition
A 1. Principals perceive more rewards than teachers.	Not explicitly tested but prin. should report more power, autonomy satisfaction, salary and hopes for career advancement than teachers.	Supported--Table 10, Table 18.
A 2. Potentials for rewards at work also differ by school level; secondary, elementary.	Sec. schools should have higher scores on hierarchy, specialization, universalism, expertise, formalization and standardization, lower scores on centralization.	Largely supported--Table 11 shows only reversal is on one aspect of specialization.
G 1. ↑perceived potential for reward→ ↑self-investment in work	Teachers who perceive more rewarding and supportive work settings should score higher on indicators of self-investment.	General support in Table 31 for teachers. For principals Table 44 shows that perceived autonomy is most critical determinant of self-investment
Assumption: Workers perceive the occupational and organizational differences in reward potential	Scores on organizational variables and mean perceptions should correlate strongly.	Table 30 shows no support for this assumption.

TABLE 49.--Continued.

General or Adapted Proposition	Data Required for Confirmation	Source and Extent of Support for Proposition
A 2a. Self-investment greater for principals than teachers, for secondary than elementary personnel	Prin. and secondary pers. should use collegial ref. groups, emphasize intrinsic aspects of work, more than teachers and elementary personnel	Tables 20 and 21 show significant support for ref. group use, not for emphasis on intrinsic aspects
A 3. Within occupational categories, organizational structure determines level of self-investment	Should find positive correlations between hierarchy, specialization, universalism, expertise, formalization and standardization when related to self-investment; negative correlation between S-I and centralization.	Table 32 shows no support for teachers response to school organization; Table 46 shows district org. has some effect on teachers; Table 44 shows no significant support for effects of district on principal
G 2. ↑S-I→ ↑Dedication	Intra-occupationally, should find strong correlations between S-I and dedication to work	Table 29 shows no support among teachers; Table 43 shows no support among principals.
A 2a. Dedication greater for principals than for teachers; secondary than elementary personnel	Principals and secondary p. should attend more conferences, be more active in prof. orgs., and sec. personnel should read more, take nonrequired courses and be absent less than elementary p.	Some support--Table 23. Principals have higher means than teachers, secondary higher than elementary; not all stat. signif.

TABLE 49.--Continued.

General or Adapted Proposition	Data Required for Confirmation	Source and Extent of Support for Proposition
G 2a. Perceived reward potential determines dedication to work	Intra-occupationally, should find strong correlation between favorable perceptions of structure and dedication to work	Table 34 shows no support among elementary teachers; Table 43 shows no significant correlations in principal data
G 3 and A 5. ↑rewards at work→ ↑planned career mobility; thus, principals have more purposive career orientation than teachers; secondary more than elementary	More career planning among principals than teachers, among secondary than elementary	Confirmation: Tables 23 and 24.
G 3a. ↑S-I→ ↑purposive mobility orientation	Strong correlation between indicators of S-I and planned and desired upward movement	Not confirmed, Table 28 except for collegial ref. grp. by desired movement
G 3b. ↑Dedication→ ↑Purposive mobility orientation	Strong correlations between ded. indicators and both planned and desired upward career movement	Not confirmed, Table 29.
G 4. If structure makes mobility impossible, ↑S-I →union efforts or withdrawal	With static data, cannot test withdrawal; expect districts w/low hierarchy, specialization to have teachers and principals emphasizing union activity	Tables 46 and 44 show mild and not significant support, considering answers to extent of activity in union. Among principals, hierarchy has no effect, only specialization

TABLE 49.--Continued.

General or Adapted Proposition	Data Required for Confirmation	Source and Extent of Support for Proposition
A 6. For teachers with less chance of upward movement (young, elementary and female secondary), ↑S-I produces emphasis on unionist aspects of dedication	For those groups of teachers only, expect to find stronger correlations of S-I with union than professional aspects of dedication	Not confirmed--Tables 24 and 25 shows older teachers concentrate on union, no meaningful effects of sex of teacher at either school level
Alternate Explanations:		
1. ↑Satisfaction→ ↑Dedication	High correlations among indicators of sat. and of ded.	Tables 26 and 27 show no support, even when sex of worker controlled
2. Personal and family characteristics determine level of dedication	High correlations between age and ded., more ded. among males and childless	Tables 24 and 25 show no support for effects of sex, age predicts mainly unionism, children have little effect independent of age

structure as I thought they would. Hence, the proposition that perceived setting influences behavior was confirmed, while the proposition that one can use observable aspects of organizational structure to predict intra-occupational variations in behavior across organizational settings was not confirmed. Since the summary presented in Table 49 requires some elaboration, I will recapitulate the major conclusions of each data chapter.

Differences in Organizational Patterns (Chapters IV-VII)

At the school level, two main clusters of organizational variables were identified. The correlations among the variables supported somewhat the idea that hierarchy, universalism, expertise and all aspects of specialization of task and worker covary; at the same time, however, the data also show that formalization, standardization and centralization of authority covary. I had not expected centralization to correlate with any aspects of ideal type bureaucracy, but the data really only suggest that school organizations do not conform perfectly to the ideal type. The major contradictions to Weber's ideas of patterns of organization receive little support either: it would be difficult to label either cluster "bureaucratic" or "rational," as Udy (1959) suggested.

Far less information was available for measurement of district organizational patterns. However, even the

existing data suggested somewhat different organizational patterns than we observed at the school level. In particular, formalization of decision-making was moderately and positively related to each of the other organizational variables, although the two measures of centralization showed only weak correlations with hierarchy and aspects of specialization, just as at the school level. It is possible that the different problems, audiences and responsibilities connected with schools and with school districts account for some of the differences in patterns. Since the propositions could be tested for the effects of each dimension of organization, I did not attempt to classify either school or district organizations into only two or three overall categories.

Moving from a consideration of organizational patterns, the next step in this chapter is to summarize the evidence that occupational differences exist and permit ranking on the bases of reward opportunity.

Occupational Differences (Chapter V)

In summing the data concerning the variety of possible occupational differences between elementary and secondary teachers, it is sufficient to note that the most important difference found was the proportion of female teachers--more elementary teachers are female, more secondary teachers are male. Differences in educational background, while not strong, correlated with school level,

so that fewer elementary than secondary teachers had completed the Masters' degree. There were only minor differences between the two groups when age and years of professional experience were considered. Among teachers, salary differences depend absolutely upon degrees completed and years of experience; neither group had a higher salary level when those two factors were controlled.

Summing up the data on demographic differences at the principal level, the most obvious difference here, too, concerned sex of worker. All secondary principals are male, less than half the elementary principals sampled are male. Furthermore, secondary principals are somewhat younger, slightly better educated and report fewer years of teaching and administrative experience. Sex of worker interacted with the latter variables, since females appeared to wait longer than males before making the move from teaching to administration. Salaries of principals are higher than those of teachers but since almost all principals checked the highest category for salary, school level differences cannot be established.

Turning to occupational differences in perceptions of favorable and rewarding work settings, we saw in Chapter V that, compared to elementary personnel, secondary personnel feel more powerful, more autonomous and more concerned about poor administrative practices but report less cooperation from parents, superiors and colleagues, and report lower satisfaction with working conditions and

somewhat greater self-investment in work (that is, secondary personnel place greater importance on the judgment of colleagues than superiors and outsiders but they also express less enthusiasm about each of the reasons for remaining in education, including intrinsic aspects of work).

When teachers and principals are compared, principals perceive greater autonomy and authority but slightly less personal influence than teachers, less awareness of union or administrative impediments to job performance and greater expectations of cooperation within the school but less cooperation with outsiders than teachers expected. On the whole, principals appear to see a more rewarding and more advantageous work environment than teachers. This difference in perception is reflected in differences in level of self-investment in work, since principals report greater willingness to re-enter education, more emphasis on professional reference groups and stronger collegial exchange networks than teachers.

The above differences in perceived setting and self-investment suggest corrolary differences in dedication to work. Data presented in Chapter V largely confirm the propositions that secondary personnel are more dedicated than elementary and that principals are more dedicated than teachers.

The next step is to consider the effects of organizational variation for each occupational type, to see whether my structural explanation of self-investment and dedication can be confirmed intra-occupationally as well.

Relative Effects of Organizational Factors, Personal and Job Satisfaction Factors on Intra-Occupational Variations in Self-Investment and Dedication to Work

In Chapter VI I ascertained the relative importance of organizational features, personal and family characteristics and level of job satisfaction in predicting variations in teacher responses and behavior. I expected to find strong correlations between each characteristic of bureaucracy (including a strong negative correlation with centralization) and teacher responses. Furthermore, I expected that variations in perceived favorableness of the school environment would also correlate with variations in responses of teachers. The latter expectation received some support but none of the other independent variables significantly influenced teacher responses. The following conclusions were established in Chapter VI:

1. Personal and family variables do not significantly affect teachers' level of self-investment in work and have only weak effects on non-union indicators of dedication, except for likelihood of taking non-required courses. When union activities are considered, age and experience positively correlate with history of union participation, probably reflecting the differences in opportunity of old and young workers to have such a history. My expectations that young and female workers would

be more militaristic, because of lack of advancement opportunities through regular channels, was not supported.

2. Teachers' level of satisfaction with three aspects of work--physical, non-physical and authority relations--had no significant effects upon level of dedication to work but satisfaction with authority was mildly related to one indicator of self-investment. However, the most plausible explanation of that phenomenon is that concern with intrinsic aspects of work leaves teachers inattentive to power problems, yielding a high score on satisfaction with authority.
3. The indicators of level of self-investment in work do not correlate internally enough to support the idea that each is a critical element of a unidimensional variable, self-investment. Instead, three separate groups can be identified, although it is difficult to say if these dimensions are equally part of self-investment.
4. Contrary to expectations, none of the aspects of self-investment strongly correlated with any of indicators of level of dedication to work. When partial correlations are run to isolate the effects of personal and family variables, we see that collegial reference group have slightly more impact on dedication for teachers who are

younger, have smaller families and/or fewer young children.

5. The original propositions suggested that teachers' perceptions of good and bad aspects of work setting would be determined by school structure. Correlations between each aspect of structure and each perceptual variable are very weak and offer no support for this idea. However, it is possible that the intra-level organizational variable is so narrow that teachers do not discriminate these fine differences. The proposition remains "not proven" rather than conclusively refuted because of that possibility.
6. The proposition linking favorable perception of work environment to level of self-investment in work is moderately supported for both occupational groups. However, school structure does not appear to have any effects upon level of self-investment within occupational categories.
7. Neither school structure nor teachers' perceptions of the work climate meaningfully explain variations in teachers' level of dedication to work. At the secondary level only, controls on level of teachers' education raise the correlation between universalism in schools and the number of teacher unions a teacher joins to .23, the strongest relationship uncovered.

It is necessary to recall at this point that the inra-occupational tests of the propositions were extremely stringent ones, since most of the variations along organizational lines was wiped out in the separation of elementary and secondary schools. The data do not permit one to decide whether the propositions could be supported if the range of organizational variation were wider.

The last step in this recapitulation of the evidence is a consideration of the effects of district structure upon principals and teachers.

District Effects upon Teachers and Principals

Data on the structure and effects of district organization mildly confirm the propositions of this study. As expected, the measures of centralization were moderately correlated but were only weakly related to other organizational dimensions. However, hierarchy, formalization and specialization showed only weak and inconsistent moderate intercorrelation, offering no adequate basis for choosing between the models of bureaucratization other writers have propounded (see Chapter II for summary).

As the data on schools led us to expect, district scores on SES and ability of students were significantly correlated and showed little correlation with homogeneity of students.

The observed variations in district structure appeared to have only a few important effects on principal

perceptions and responses. While bureaucratization at the district level does not appear to discourage principals' self-investment and dedication to work, there is no significant evidence that it encourages these responses, although the data suggest moderate tendencies in that direction. Student composition variables seem to play a more important role in predicting principal responses than was anticipated, since SES and ability levels of students correlate strongly with indicators of principals' mean levels of self-investment and dedication.

Surprisingly, the district-level variables appear to be more critical in explaining significant differences in teacher responses across districts than in explaining principal differences. Particularly, hierarchy at the district level affects teachers more than principals, contrary to my expectations. Although not all the evidence is statistically significant, data on district effects upon teachers offer somewhat more support for the propositions relating bureaucratization to high self-investment and dedication than do the principal data. For teachers as well as principals, though, SES and ability of students encourage self-investment in work, evidenced by greater reliance on close colleagues as a reference group for teachers in high SES schools.

Data concerning possible causes and effects of teacher contract emphasis show that districts where teachers cooperate with outsiders and express concern with extrinsic

aspects of work produce contracts emphasizing extrinsic aspects of work. Contracts emphasizing professionalism occur in districts where teachers derive great satisfaction from non-physical aspects of work.

Less purposive career orientations of teachers predominate in districts higher in centralization of authority, as my propositions predicted, although actual turnover rates can not be attributed to any organizational variable.

On the whole, the data on district structure and effects provide moderate support for the propositions that bureaucratization encourages self-investment and dedication providing a favorable environment for professional employees. Since several aspects of organizational structure could not be considered, due to limitations in the data making differentiation of districts impossible, it is encouraging to find that the few variables that could be measured yielded some confirmation of the propositions.

General Conclusions

In drawing some overall conclusions regarding the contributions of this dissertation research to scientific explanation of worker behavior it is apparent to me that this study illuminated some aspects of the phenomenon while, at the same time, uncovering new difficulties that could not be handled with the available data and resources.

I will attempt now to list the major contributions and areas for future refinement:

1. Distinctive elementary-secondary school patterns of organization have been revealed; at the district level, organizational patterns appeared to be less coherent, perhaps reflecting the need for a larger sample size.
2. The predicted relationship between favorable perceptions of work environment and self-investment in work received substantiation. However, the indicators of self-investment either lack equal validity or suggest that self-investment is a multi-dimensional concept. Further research and consideration of this problem is indicated.
3. Predicted occupational differences in both self-investment and dedication to work have been confirmed; furthermore, the inter-occupational patterns support the expected positive relationship between these two variables.
4. When occupation is controlled, no meaningful effects of school structure upon teachers' self-investment and dedication were revealed. However, neither did bureaucratization of structure appear to depress levels of self-investment or dedication of teachers. Thus one assumption running through social science, namely, that formalized work settings alienate workers, appears to be in

error. However, it would be premature to conclude that organizational characteristics are irrelevant to worker behavior until a replication of this study, using a broader range of organizational structures but still intra-occupationally focused. The difficulty with this approach will be the separation of organizational from occupational influences, requiring selection of an occupation whose members are distributed across a broad spectrum of organizational forms--perhaps accounting or engineering specialists.

5. None of the proposed interrelations between career orientation and either self-investment or dedication to work received confirmation from the data. When actual turnover rates were considered, principals and secondary personnel showed lower turnover, even when sex of worker was controlled. However, since it was impossible to distinguish quitting from involuntary termination or, among those who quit, establish bases for quitting, the propositions could not be tested completely. Further research on this question would have to establish more comprehensive information on career plans and desires than the present data yielded, as well as separating voluntary from involuntary turnover.

6. Two major weaknesses in the data on dedication to work were revealed in the analysis. First, the questions asked principals were not nearly as comprehensive as those asked teachers. Not only was it difficult to compare principals and teachers, it was difficult to ignore the fact that possible areas of principals dedication were insufficiently covered. Since the original survey was not designed with an eye to the propositions I tried to test, it naturally did not cover in detail all aspects of the problems of interest to me. For this reason, my conclusions regarding relative strength of principals' and teachers' dedication to work must be considered tentative.

The second weakness in the measures of dedication stems from the phrasing of questions on the teacher survey. Although teachers are asked about current professional activities (reading, course work, etc.) they are asked about the history of their union involvement, not just current participation. This difference in phrasing has two important effects: an inflation in scores on union activity relative to professional involvement and a bias in favor of older, more experienced teachers, who have had more years in which they could participate in union activity and more years of interaction with other teachers,

probably essential to achieving union office. To be really comparable with other measures of dedication, measures of union involvement should refer only to present involvements.

7. Despite the problems and inconsistencies in data supporting my propositions, this study strongly suggests that two alternative explanations of worker behavior are inadequate. Neither level of job satisfaction nor personal and family characteristics predict self-investment or dedication levels as well as occupational factors do. Furthermore, neither alternative explanation fared better than my propositions regarding the effects of intra-occupational organizational structure upon workers. It is at least as important to clear away mistaken explanations of phenomena as it is to establish a correct explanation, so I believe that this dissertation makes a valuable contribution from that perspective, apart from the status of my alternative explanation of worker behavior.
8. Socio-economic status of the community is critical in at least two ways: in its effects upon principals' level of self-investment in work and in its effects upon the pattern of organization of secondary schools. The data showed that the original propositions should be refined to include the idea that SES of students somehow affects the

reward potential for principals--perhaps community SES is a major determinant of the prestige associated with principalship of given schools. However, SES did not play any such role for teachers. With respect to the second point about the role of SES, the data showed that secondary school organizational patterns were considerably strengthened when SES was controlled. Perhaps different organizational practices are required to process teenage students of different SES or, perhaps different kinds of specialists, and procedures are demanded by high and low SES communities. The implications of SES for organizational structure require further investigation for adequate explanation.

9. Detailed study of the effects of district variables upon teachers might be fruitful, since my data suffered from a paucity of cases (only 5 districts) and an overabundance of variables, both structural and dependent. Even this problematic data, though, suggested that district variables may be more important determinants of teacher behavior than I had expected. Particularly, district specialization may affect potential career moves for teachers, while district hierarchy, formalization and centralization may place limits on school organizational patterns. The latter possibility opens up a whole new area of potential importance in the

explanation of school structure and is certainly worthy of further attention. If the district variables actually are critical in determining teacher and principal behavior, one would expect to find considerably lower levels of self-investment and dedication in smaller districts, although comparison across any broad range of districts probably would introduce variations on many other dimensions as well.

10. The complex data and inconsistent results of this dissertation underscore the need for further research on the range of variables potentially affecting variation in self-investment in work. It is apparent that organizational and occupational factors alone cannot account for all the variation in teacher and principal responses. At the same time, the data demonstrate the failure of variables like sex and marital status as adequate predictors of level of self-investment in work. It is possible that some previously neglected factor, like family economic background, occupation of spouse, parents or friends or individual differences in the importance of self-esteem (relative to other personal and interpersonal needs, such as needs for love, companionship, power, security, etc.) may play some role in determining variations in self-investment in work. Further research should

focus upon the independent and joint effects of these variables, as well as the structural variables this dissertation considered.

As an example of how these variables might interact to influence self-investment in work, consider the many male teachers from working class backgrounds. It seems very possible that teachers (or principals) from such families may feel great self-esteem just from achieving entrance into a "profession"--that is, they may make only inter-occupational comparisons of achievement and decide they have proved their worth relative to others in their family (Faunce, 1972). In such a case there may be no motivational basis for continued striving for occupational success. Furthermore, one could argue that people who go into teaching may be more concerned about security than self-esteem, have low levels of need-achievement, like their position of authority relative to students, or in some other way do not require continued testing of own abilities and performance of the sort that high self-investment in work involves. Quite clearly, Faunce's idea that need for self esteem is a variable, not an absolute, must be taken into account in more detailed future research. One would expect organizational and occupational structure to affect self-investment only for

workers who have some minimum interest in self-esteem maintenance through intra-occupational comparison of performance. My assumption that teachers and principals would not completely lack interest in self-esteem could not be tested with the data at hand; furthermore, there may be critical differences in the degree of concern for self-esteem of various individuals in the sample, although one would expect such differences to be random across schools and hence not confound the effects of structural variables. Any further testing of the bases of self-investment in work must consider these problems.

11. This dissertation indicates the need for investigation in at least one more area--the presumed effects of teacher dedication to work. How do school structure and teacher behavior affect student learning? It is possible, for instance, that some indicators of teacher self-investment in work may actually inhibit learning for some kinds of students. More generally, one might ask if "professionalism" always works for the good of the client. This line of inquiry deserves further attention. In a similar vein, one might ask whether increasing self-investment and dedication of teachers and principals has any implications for the school district organizations. For

instance, what happens if teachers begin to emphasize purely professional concerns in collective bargaining? In fact, what happens to teachers as a special interest group when dedication to work leads teachers to identify only others in their specialty as colleagues? In this dissertation and in most research on worker behavior, investigators assume that dedication to work encourages goal-attainment for the organization, i.e., that dedicated workers are better workers. This basic assumption should not be left unchallenged.

Summary

In summarizing this concluding chapter, it is apparent to me that this research, while not consistently supportive of my original propositions, at least suggests some of the advantages to be gained from this new way of looking at work behavior. The perspective of Faunce, Dubin and Vroom, modified in this dissertation to include structural determinants of importance of work, is a reasonable synthesis of ideas borrowed from research on formal organizations, in occupations and in the field of symbolic interactionism. This dissertation has not only offered some confirmation of the idea that self-investment in work is critical to dedication and is dependent upon work structure, but it has also produced evidence seriously damaging the conventional explanations of variations in

worker behavior--that over-bureaucratization, low job satisfaction or certain personal and family characteristics lead workers to disengage themselves from work. Whether or not the structural and self-investment explanations of worker behavior are adequate on their own must be determined by further research.

Despite the tentative state of the conclusions in this dissertation and despite the clear need for continued investigation of many of these problems, I believe that this research has presented a useful and workable integration of organizational theory and logically grounded social-psychological explanations of behavior, producing a synthesis that considers human behavior in structural context. Furthermore, this dissertation goes far beyond typical research on the topic of worker behavior with its over-reliance upon measures of group composition and supervisory style as measures of work context. In demonstrating that occupational and organizational factors can affect perceptions and behavior of workers, this dissertation helps to retrieve the study of worker behavior from the realm of predominantly psychological, individual problems and to show that the common problems and restraints faced by individuals in similar structural settings may be an important factor in behavior.

BIBLIOGRAPHY

BIBLIOGRAPHY

Adams, J. Stacy. "Wage Inequities, Productivity and Work Quality, Industrial Relations. 3(1963).

_____. "Inequity in Social Exchange." In L. Berkowitz (ed.), Advances in Experimental Social Psychology. Vol. 2, N. Y. Academic Press, 1965.

Anderson, James. "The Authority Structure of the School." Educational Administration Quarterly. III (1967), 130-148.

Argyris, Chris. Personality and Organization. N.Y.: Harper, 1957.

Armknecht, P. A. and J. F. Early. "Quits in Manufacturing." Monthly Labor Review. 95(1972).

Backman and Secord. "The Self and Role Selection." In Gordon and Gergen (eds.), The Self in Social Interaction. N.Y.: Wiley, 1968, p. 295.

Becker, H. "The Career of School Teachers." American Journal of Sociology. 58(1952), 470-7.

_____. "The Teacher in the Authority System of the Public School." Journal Educational Sociology. 27(1953).

Behrend, H. "Absence and Labour Turnover in a Changing Economic Climate." Occup. Psychol. 27(1953), 69-79.

Bell, Gerald D. "Determinants of Span of Control." American Journal of Sociology. 73(1967), 100-109.

Betz, David. "Organizational Correlates of Occupational Orientation and Support of Negotiating Organization." Unpublished Ph.D. dissertation, Michigan State University, 1968.

Bidwell, C. E. "The School as a Formal Organization." In J. G. March (ed.), Handbook of Organizations. Chicago: Rand McNally, 1965.

Blau, Peter. The Dynamics of Bureaucracy. Chicago: University of Chicago Press, 1955.

Blau, P. and W. Scott. Formal Organizations. San Francisco: Chandler, 1962, pp. 66-8.

Blauner, Robert. Alienation and Freedom. Chicago: U. of Chicago Press, 1964.

_____. "Work Satisfaction and Industrial Trends in Modern Society." In W. Galenson and S. M. Lipset (eds.), Labor and Trade Unionism. N.Y.: Wiley, 1960.

Blumer, Herbert. "Attitudes and the Social Act." Social Problems. 3(1955).

Box, S. and S. Cotgrove. "Scientific Identity, Occupational Selection and Role Strain." Brit. Journal of Sociology. 17(1966).

Brophy, A. L. "Self, Role and Satisfaction." Genet. Psych. Monograph. 59(1959).

Buchanan, Bruce. "Building Organizational Commitment: The Socialization of Managers in Work Organizations." Administrative Science Quarterly. 19(1974).

Caplow, Theodore. The Sociology of Work. U. of Minnesota Press, 1954.

Carlson, Richard O. Executive Succession and Organizational Change. Chicago: U. of Chicago Press, 1962.

_____. "Research on the School System as an Organization." School Review. 66(1958), 473-475.

Child, John. "Organizational Structure and Strategies of Control." Administrative Science Quarterly. 19(1974).

Chinoy, Eli. The Automobile Worker and the American Dream. Garden City: Doubleday, 1955.

Coleman, James S. Equality of Educational Opportunity. Washington, D.C.: Government Printing Office, 1966.

Coopersmith, R. The Antecedents of Self-Esteem. San Francisco: Freeman, 1967, pp. 259-260.

Corwin, Ronald. A Sociology of Education. N.Y.: Appleton, Century, Crofts, 1965, pp. 241-265.

_____. "The Professional Employee: A Study of Conflict in Nursing Roles." Americal Journal of Sociology. 66(1961).

_____. "Patterns of Organizational Conflict." Administrative Science Quarterly. 14(1969).

_____. "Education and the Sociology of Complex Organizations." In D. Hansen and J. Gerstl (eds.), On Education: A Sociological Perspective. N.Y.: Wiley, 1967.

DeFleur, M. and F. Westie. "Attitudes as a Scientific Concept." Social Forces. 42(1963).

Dubin, R. "Industrial Workers' Worlds." Social Problems. 3(1956).

Etzioni, A. The Semi-Professions and Their Organization. N.Y.: The Free Press, 1969, pp, 4.9.183.

Faunce, W. "Job Satisfaction and the Meaning of Work." Paper for U.S. Dept. of Labor Conference on Job Satisfaction. Washington, D.C., December, 1968.

_____. "Self Investment in the Occupational Role." Paper presented at meeting of Southern Sociological Society. New Orleans, April 6, 1972.

Friedman, A. and P. Goodman. "Wage Inequity, Self-Qualifications and Productivity." Org. Behavior and Human Performance. 2(1967).

Geer, Blanche. "Occupational Commitment and the Teaching Professions." School Review. 74(1966).

Gerstl, Joel. "Education and the Sociology of Work." In D. Hansen and J. Gerstl (eds.), On Education: A Sociological Perspective. N.Y.: Wiley, 1962.

Gerstl, J. W. and E. J. Guba. "Social Behavior and the Administrative Process." School Review. 65(1957).

Given, Charles. "Integration and Conflict in Educational Organizations." Unpublished Ph.D. dissertation. Michigan State University, 1969.

Glaser, Barney. Organizational Scientists: Their Professional Careers. Indianapolis: The Bobbs-Merrill Company, Inc., 1964.

Goldner, F. and R. Ritti. "Professionalization as Career Immobility." American Journal of Sociology. 73(1967).

Goldthorpe, J. "Attitudes and Behavior of Car Assembly Workers." Brit. Journal of Sociology. 17(1966).

Goode, W. "A Theory of Role Strain." American Sociological Review. 25(1960).

Goslin, David. The School in Contemporary Society. Scott Foresman and Co., 1965.

Gouldner, Alvin. "Cosmopolitans and Locals." Administrative Science Quarterly. 2(1957).

Grass, Neal and Anne Trask. Men and Women as Elementary School Principals. Cambridge, Mass: Harvard, 1964.

Griffiths, David. Human Relations in School Management. N.Y.: Appleton, Century, Crofts, 1962.

Gross, Llewellyn. "A Theory of Power and Organizational Processes." School Review. 70(1962).

Grusky, Oscar. "Career Mobility and Organizational Commitment." Administrative Science Quarterly. 10(1966).

Guest, R. H. "Job Enlargement: A Revolution in Job Design." Personnel Admin. 20(1957).

Hage, Jerald and Michael Aiken. "Relationship of Centralization to Other Structural Properties." Administrative Science Quarterly. 12(1967).

Hall, Richard. "The Concept of Brueaucracy." American Journal of Sociology. 69(1963).

_____. "Professionalization and Bureaucracy." Administrative Science Review. 33(1968).

Hansen, Donald and Joel Gerstl (eds.). On Education--Sociological Perspectives. N.Y.: Wiley, 1967.

Herzberg, Frederick; B. Mausner; and B. Snyderman. The Motivation to Work. N.Y.: John Wiley and Sons, 1959, pp. 80-82.

Heydebrand, S. W. and R. Stauffer. "The Structure of Small Bureaucracies." Administrative Science Quarterly. 31(1966).

_____. "The Hierarchy of Authority in Organizations." American Journal of Sociology. 73(1968), 453-67.

Hickson, David et al. "Operations Technology and Organization Structure." Administrative Science Quarterly. 14(1969).

Homans, George. Social Behavior. N.Y.: Harcourt Brace and World. 1961.

Hrebiniak, L. and J. Alutto. "Personal and Role-Related Factors in the Development of Organizational Commitment." Administrative Science Quarterly. 17(1972).

Hughes, Everett. "Work and the Self." In J. Rodner and M. Sherif (eds.), Social Psychology at the Crossroads. N.Y.: Harper and Row, 1951.

Hyman, H. "The Psychology of Status." Archives of Psychology. #269. 1942.

Ingham, R. G. Size of Industrial Organization and Worker Behavior. Cambridge. England: Cambridge University Press, 1970.

Israel, Joachim. Alienation from Marx to Modern Sociology. Boston: Allyn and Bacon, 1971.

Jencks, Christopher, et al. Inequality: A Reassessment of the Effect of Family and Schooling in America. N.Y.: Basic Books, 1972.

Kassalow, E. "White-Collar Unionization in the U.S." In White-Collar Trade Unions. A. Strumthal (ed.). Urbana, Ill.: U. of Illinois Press, 1967, p. 337.

Katz, Daniel and R. Kahn. The Social Psychology of Organizations. N.Y.: Wiley, 1965.

Katz, F. E. Autonomy and Organization. N.Y.: Random House, 1968.

_____. "Explaining Informal Work Groups in Complex Organizations." Administrative Science Quarterly. 9(1965), 204-223.

Kelly, S. "Two Functions of Reference Groups." In Readings in Social Psychology. Edited by Swanson, et al., 1952.

Kohn, Melvin. "Bureaucratic Man: A Portrait and an Interpretation." American Sociological Review. 36(1971).

Kornhauser, Arthur. Mental Health of the Industrial Worker. N.Y.: Wiley, 1965.

_____. Scientists in Industry. Berkeley: U. of Calif. Press, 1963.

Ladinsky, J. "Occupational Determinants of Geographic Mobility." American Sociological Review. 32(1967), 48-53.

LaPorte, T. "Conditions of Strain and Accomodation in Industrial Research Organizations." Administrative Science Quarterly, 10(1965), 32.

Lawler, E. E. "Equity Theory as a Predictor of Productivity and Work Quality." Psych. Bulletin. 70(1968).

Lawler, E. E., et al. "Inequity Reduction Over Time in an Individual Overpayment Situation." Org. Beh. and Human Performance. 3(1968).

Lawler, E. E. "Job Design and Employee Motivation." Personal Psych. 32(1969).

Lieberman, Myron. Education as a Profession. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1956.

Likert, Rensis. New Patterns of Management. N.Y.: McGraw-Hill, 1961.

Litwak, E. "Models of Bureaucracy Which Permit Conflict." American Journal of Sociology. 67(1961).

Litwin, G. and R. Stringer. Motivation and Organizational Climate. Boston: Harvard University, 1968.

Lodahl, T. and M. Kejner. "The Definition and Measurement of Job Involvement." Journal of Applied Psychology, 49(1965).

Lortie, Dan. "Control and Autonomy in Elementary Teaching." In A. Etzioni (ed.), The Semi-Professions and Their Organization. N.Y.: The Free Press, 1969.

_____. "Shared Ordeal and Induction to Work." In H. S. Becker, et al. (eds.), Institutions and the Person. Chicago: Aldine, 1968.

Luck, P. and J. Heiss. "Social Determinants of Self-Esteem in Adult Males." Soc. and Soc. Research. 56(1972).

Mangione. Thomas. Turnover: A Model and a Review of the Literature. Ann Arbor: Survey Research Center, 1972.

Manis, M. "Social Interaction and the Self-Concept." Journal of Abnormal and Social Psychology. 51-1 (1951).

Mansfield, Roger. "Bureaucracy and Centralization." Administrative Science Quarterly. 18(1973).

March, James and Herbert Simon. Organizations. N.Y.: Wiley, 1963, pp. 94-101.

Marcson, Simon. The Scientist in American Industry. Princeton: Industrial Relations Section, 1960.

Marvick, D. Career Perspectives in a Bureaucratic Setting. Ann Arbor, Michigan: U. of Michigan Press, 1954.

Maslow, A. Motivation and Personality. N.Y.: Harpers, 1954.

Maurer, John. "Work Role Involvement." Unpublished Ph.D. thesis, Michigan State University, 1967.

Mausner, B.; R. Peterson; and D. Copwell. Job Attitudes: Review of Research and Opinion. Pittsburgh: Psychological Service of Pittsburgh, 1957.

Michigan Department of Education. Technical Report: Michigan School Census of 1970. 1970.

Moeller, Gerald and W. W. Charters. "Relation of Bureaucratization to Sense to Power Among Teachers." Administrative Science Quarterly. 10(1966).

Montagna, P. "Professionalization and Bureaucratization in Large Professional Organizations." American Journal of Sociology. 74(1968).

Morse, Nancy and Everett Riemer. "The Experimental Change of a Major Organizational Variable. Journal Abn. and Soc. Psych. 52(1956).

Neter, John and William Wasserman. Applied Linear Statistical Models. Homewood, Ill.: Irwin, 1974.

Orzack, Louis. "Work as a Central Life Interest of Professionals." Social Problems. 7(1969).

Parnes, Herbert, et al. The Pre-Retirement Years. Washington: U.S. Government Printing, 1970.

_____. Career Thresholds. Washington, D.C.: U.S. Government Printing Office, 1971.

Patchen, Martin. "Alternative Questionnaire Approaches to the Measurement of Influence in Organizations." American Journal of Sociology. 69(1963).

_____. Participation, Achievement and Involvement on the Job. Englewood Cliffs, N.J.: Prentice-Hall, 1970.

Pellegrin, R. and C. Coates. "Executives and Supervisors: Contrasting Definitions and Career Success." Administrative Science Quarterly. 1(1957), 506-17.

Pelz, D. and F. Andrews. Scientists in Organizations. N.Y.: Wiley, 1966.

Perrow, Charles. Organizational Analysis. Belmont, Calif.: Wadsworth, 1970, pp. 45-7, 77-85, 153.

Perrucci, Robert and Joel Gerstl. The Engineers and the Social System. N.Y.: John Wiley, 1969, pp. 283, 308.

Porter, L. "Job Attitudes in Management." Journal of Applied Psychology. 46(1962).

Porter, L. and Lawler. "The Effects of Tall and Flat Organizational Structure on Managers' Job Satisfaction." Personnel Psych. 17(1964), 35-48.

Pugh, D. S., et al. "Dimensions of Organizational Structure." Administrative Science Quarterly. 13(1968).

Reiman, Bernard. "On the Dimensions of Bureaucratic Structure." Administrative Science Quarterly. 18(1973).

Reiss, Albert. Occupations and Social Status. N.Y.: The Free Press of Glencoe, 1961.

Robinson, John; Robert Athanasian; and Kendra Head. Measures of Occupational Attitudes and Occupational Characteristics. Ann Arbor: Survey Research Center, 1969.

Rock, Donald and John Hemphill. Report of the Junior High School Principalship. Vol. 2. National Association of Secondary School Principals, 1966.

Rosenberg, Morris. Occupations and Values. Glencoe, Ill.: The Free Press, 1957.

_____. "Psychological Selectivity in Self-Esteem Formation." In C. Gordon and Gergen (eds.), The Self in Social Interaction. New York: Wiley, 1968, pp. 1-32, 55-9.

Saxe, Richard W. Perspectives on the Changing Role of the Principal. Springfield, Ill.: Charles C. Thomas Publishing, 1968.

Schacter, Stanley, et al. "Emotional Disruption and Industrial Productivity." Journal of Applied Psychology. 45(1961), 201-213.

Scott, William R. "Professionals and Complex Organizations." In H. Vollmer and D. Mills (eds.), Professionalization. Englewood Cliffs: Prentice-Hall, 1966.

Scott, William and Terence Mitchell. Organization Theory. Homewood, Ill.: Richard D. Irwin, Inc., 1972, p. 107.

Seeman, Melvin. "On the Personal Consequences of Alienation in Work." American Sociological Review. 32(1967).

Sheldon, Mary. "Investments and Involvements as Mechanisms Producing Commitment to Organizations." Administrative Science Quarterly. 16(1971), 142-7.

Shibutani, T. "Reference Groups and Social Control." In Rose (ed.), Human Behavior and Social Processes. Boston: Houghton-Mifflin, pp. 128-138.

Smith, C. "Effects of Opportunity Structure and Sex of Worker: Job Leaving Patterns in the Michigan Civil Service." Paper presented at North Central Association Meeting, 1975.

Sofer, Cyril. Men in Mid-Career. Cambridge U. Press, 1970.

Spector, A. J. "Expectations, Fulfillment and Morale." Journal Abnorm. Soc. Psych. 50(1956.

Stinchcombe, Arthur L. Creating Efficient Industrial Administration. N.Y.: Academic Press, 1974.

Stinchcombe, Arthur. "Bureaucratic and Craft Administration of Production." Administrative Science Quarterly. 4(1959).

Tannenbaum, Arnold S., et al. Hierarchy in Organizations. San Francisco: Jossey, Bass Publishers, 1974.

Telly, C. W. French and W. Scott. "The Relation of Inequity to Turnover Among Hourly Employees." Administrative Science Quarterly. 16(1971).

Thibaut, John and Harold Kelley. The Social Psychology of Groups. N.Y.: Wiley, 1959.

Thompson, James. Organizations in Action. N.Y.: McGraw-Hill, 1967, p. 107.

Thompson, James and Richard Carlson, and Richard Avery. Occupations, Personnel and Careers. Pittsburgh: Administrative Science Center, U. of Pittsburgh, 1962.

Udy, Stanley. "'Bureaucracy' and 'Rationality' in Weber's Organization Theory: An Empirical Study." American Sociological Review. 24(1959).

United States Department of Labor. Job Satisfaction: Is There a Trend? Washington, D.C.: U.S. Government Printing Office, 1974.

Vroom, Victor. "Industrial Social Psychology." In G. Lindzey and E. Aronson (eds.), The Handbook of Social Psychology. Vol. 5. Reading, Mass.: Addison-Wesley, 1969, pp. 199-204.

_____. Work and Motivation. N.Y.: Wiley, 1964.

_____. "Ego-Involvement, Job Satisfaction and Job Performance." Personnel Psychology. 15(1962), 159-77.

Vroom, Victor and K. MacCrimmon. "Toward a Stochastic Model of Managerial Careers." Administrative Science Quarterly. 13-1(1968).

Waisanen, Frederick. "Self-Evaluation and Performance Estimates." Soc. Quarterly. (1962).

Walker, Charles and Robert Guest. "The Man on the Assembly Line." Harvard Business Review. 30(1962).

Weber, Max. The Theory of Social and Economic Organization. A. M. Henderson and T. Parsons (trans.) and T. Parsons (ed.). Glencoe, Ill.: The Free Press, 1947.

Winer, B. J. Statistical Principles in Experimental Design. N.Y.: Mc-Graw-Hill, 1962.

Woodward, Joanne. Industrial Organization. London: Oxford University Press, 1965.

Yuchtman, E. "Reward Distribution and Work-Role Attractiveness in the Kibbutz." American Sociological Review. 37(1962), 81-95.

Zaleznick, A.; G. Dalton; and L. Barnes. Orientation and Conflict in Career. Boston: Harvard U., 1970, pp. 54-60, 132-7.

APPENDIX A

TEACHER QUESTIONNAIRE

EDUCATION ADMINISTRATION STUDY
Department of Sociology
Michigan State University

TEACHER QUESTIONNAIRE

1. In what grades are you teaching? (Include any pre-first grade under "K." Please circle all the grades in which you are teaching this year.)

   K 1 2 3 4 5 6 7 8 9 10 11 12 13

2. What is your employment status in the school system? CHECK ONE.

   a. ____ I have a regular full-time appointment with tenure.
   b. ____ I have a regular full-time appointment but not on tenure.
   c. ____ I am a substitute teacher part-time.

3. Counting the present year, what is the total number of years of full-time teaching experience you have had? (Consider counseling as teaching experience.) (Write in number)

   I have had _____ years of full-time teaching experience

4. Counting the present year, what is the total number of years of full-time teaching experience you have had in this school? (Consider counseling as teaching experience.) (Write in number)

   I have had ____ years of full-time teaching experience in this school.

5. Are you a member of an affiliate of MEA or MFT? CHECK ONE

   No _____ Go to Question 6)
   Yes ____

a. If yes, which one? CHECK ONE. MEA ____ MFT ____

b. How many years have you been a member? (Write in number) _____ years

c. Have you held an office in the local organization? CHECK ONE. Yes _____ No _____

d. Have you held an office in the state organization? CHECK ONE. Yes _____ No _____

e. Have you presented or contributed to one or more state program(s)? CHECK ONE. Yes_____ No _____

6. How many other teacher organizations do you belong to? (Write in number) _____ teacher organizations

7. Have you ever served on a committee, commission, council or held office in the MEA or MFT?

a. At the state level? CHECK ONE. Yes _____ No _____

b. At the local level? CHECK ONE. Yes _____ No _____

8. Are you now, or have you ever been, a building representative? CHECK ONE. Yes _____ No _____

9. How many teacher conferences, conventions, and workshops have you attended since September, 1966? (Write in number) _____ meetings

10. How many books have you read in the last 6 months that are related to your teaching or teaching subject area? (Do not include reading required by college courses you may be taking. Write in the number of books.) _____ books

11. Do you subscribe to any teaching or subject-matter journals other than MEA or MFT membership publications? CHECK ONE. Yes _____ No _____

12. How many teaching journals do you read regularly other than the MEA or MFT membership publication? (Write in number) _____ journals

13. About how much time do you spend reading teacher journals in a typical month? (Do not include reading by college courses you may be taking.) (Write in number.) _____ hours per month

14. People remain in an occupation for many different reasons. How important are each of the following for remaining in teaching? CHECK ONE ON EACH LINE.

	Very great importance	Great importance	Some importance	Slightly important	Not important at all
a. The students with whom I have contact in this school	____	____	____	____	____
b. The friendships I develop with the people at work	____	____	____	____	____
c. The opportunity to be creative and original in the work I do	____	____	____	____	____
d. My salary compared to others at my level of education	____	____	____	____	____
e. My present job in the light of my career expectations	____	____	____	____	____
f. The physical conditions under which I work	____	____	____	____	____
g. The number of duties I have besides actual teaching	____	____	____	____	____
h. My teaching load	____	____	____	____	____
i. Educating the future generation	____	____	____	____	____
j. The opportunity to be a professional	____	____	____	____	____

	Very great importance	Great importance	Some importance	Slightly important at all	Not important
k. My vacations and free time	____	____	____	____	____
l. The prestige and respect I receive from the community	____	____	____	____	____
m. Working with books and ideas	____	____	____	____	____

15. To what extent can you expect cooperation and support for your ideas about doing your job from each of the following? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. Member(s) of the school board	____	____	____	____	____
b. Other teachers in your specialty in your school	____	____	____	____	____
c. Your department head	____	____	____	____	____
d. Superintendent of schools	____	____	____	____	____
e. Officers of the local chapter of your teacher organization (not the building representatives)	____	____	____	____	____
f. Principal of your school	____	____	____	____	____
g. Officer(s) of the PTA in your school	____	____	____	____	____

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
h. Parents of the children in your classroom	____	____	____	____	____
i. The superintendent's staff	____	____	____	____	____
j. Other teachers not in your specialty in your school	____	____	____	____	____
k. The principal's assistants	____	____	____	____	____

Who actually has the most influence over the following types of decisions? CHECK ONE ON EACH LINE. In the last column, please put a letter (a-l) indicating your opinion about who should have the most influence over that decision.

TYPE OF DECISION	WHO ACTUALLY HAS THE MOST INFLUENCE: teacher (a)	teacher organization, e.g., MEA or MFT (b)	entire faculty of school (c)	faculty of a specific department (d)	committee of teachers appointed by the principal (e)	principal's assistant(s) (f)	principal (g)	administrative assistant(s) of superintendent (h)	superintendent (i)	State Dept. of Education (j)	school board (k)	parents (l)	WHO SHOULD HAVE THE MOST INFLUENCE? (Write in the letter
1. Selecting required textbooks													
2. Selecting supplementary reading matter													
3. Determining the required courses													
4. Hiring new teachers													
5. Giving permission to outside groups to speak to students													
6. Formulating instructional policy													
7. Promoting a teacher to department head or other supervisory position													
8. Determining the percentage of students to be normally passed, failed, etc. (grading curve)													

TYPE OF DECISION	WHO ACTUALLY HAS THE MOST INFLUENCE: teacher (a)	teacher organization, e.g., MEA or MFT (b)	entire faculty of school (c)	faculty of a specific department (d)	committee of teachers appointed by the principal (e)	principal's assistant(s) (f)	principal (g)	administrative assistant(s) of superintendent (h)	superintendent (i)	State Dept. of Education (j)	school board (k)	parents (l)	WHO SHOULD HAVE THE MOST INFLUENCE? (Write in the letter
9. Determining if a controversial teacher should be re-hired													
10. Determining whether a faculty member should have tenure													
11. Ruling on teacher(s) grievances													
12. Determining what concepts and values are to be taught in a particular course													
13. Determining methods a teacher should use													
14. Determining what courses are to be taught													

17. To what extent do you exchange information, opinions, and ideas about doing your job with each of the following? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. Member(s) of the school board	____	____	____	____	____
b. Other teachers in your specialty in your school	____	____	____	____	____
c. Your department head	____	____	____	____	____
d. Superintendent of schools	____	____	____	____	____
e. Officers of the local chapter of your teacher organization (not the building representatives)	____	____	____	____	____
f. Principal of your school	____	____	____	____	____
g. Officer(s) of the PTA in your school	____	____	____	____	____
h. Parents of the children in your classroom	____	____	____	____	____
i. The superintendent's staff	____	____	____	____	____
j. Other teachers not in your specialty in your school	____	____	____	____	____
k. The principal's assistants	____	____	____	____	____

18. To what extent do each of the following interfere with educational objectives? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. PTA criticism of classroom operations	____	____	____	____	____
b. Community criticism of school operations	____	____	____	____	____
c. Collective negotiations changing the teacher-principal relationship	____	____	____	____	____
d. Grievances changing the teacher-principal relationships	____	____	____	____	____
e. Teacher organizations requiring too much involvement and participation for the teachers in this school	____	____	____	____	____

19. How satisfied are you with each of the following? CHECK ONE ON EACH LINE.

	Very greatly satis-fied	Greatly satis-fied	Some-what satis-fied	Slightly satis-fied	Not satis-fied at all
a. The prestige and respect I receive from the community	____	____	____	____	____
b. My teaching load	____	____	____	____	____
c. The relation-ships I have with the princi-pal's assistants	____	____	____	____	____
d. My vacations and free time	____	____	____	____	____
e. The physical conditions under which I work	____	____	____	____	____
f. The amount of autonomy given me by the principal to do my job	____	____	____	____	____
g. The fairness with which duties are distributed in this school building	____	____	____	____	____
h. The students with whom I have contact	____	____	____	____	____
i. My fringe benefits	____	____	____	____	____
j. The relation-ships I have with the superinten-dent's assistants	____	____	____	____	____
k. The subjects I teach	____	____	____	____	____

	Very greatly satis-fied	Greatly satis-fied	Some-what satis-fied	Slightly satis-fied at all	Not satis-fied
l. My salary compared to others at my level of education	____	____	____	____	____
m. The friendships I develop with the people at work	____	____	____	____	____
n. My present job in the light of my career expectations	____	____	____	____	____
o. The size of the classes I teach	____	____	____	____	____
p. The adequacy of the supervision I receive from the superintendent's staff	____	____	____	____	____

20. How frequently do the following events occur within your school building? CHECK ONE ON EACH LINE.

	Very frequently	Quite frequently	Somewhat frequently	Not too frequently	Not frequently at all
a. Teachers are pressured to join a professional organization against their will	____	____	____	____	____
b. School building rules are changed so often that one never really gets accustomed to anything	____	____	____	____	____
c. The principal stresses results rather than methods	____	____	____	____	____
d. The principal protects his faculty from pressures of student's parents	____	____	____	____	____
e. Teachers' organizations interfere with administrative requirements	____	____	____	____	____
f. The loyalty of teachers to the administration is used as a criteria for promotion rather than their professional merits	____	____	____	____	____

	Very frequently	Quite frequently	Somewhat frequently	Not too frequently	Not frequently at all
g. The principal obtains staff members' approval on important matters before taking action	____	____	____	____	____
h. The school board's competence to judge on many educational matters is questioned by the staff	_____	_____	_____	_____	_____
i. The superintendent and his administration is responsive to suggestions made by the principal	____	____	____	____	____
j. The teacher has to go through unnecessary channels to get something accomplished	____	____	____	____	____
k. Teachers' organizations interfere with teaching practices	____	____	____	____	____
l. The principal treats all staff members as his equals	____	____	____	____	____
m. Teachers are pressured by other faculty members to comply with unwritten rules (e.g., don't complain, don't be bossy)	____	____	____	____	____

21. What do you actually expect to be doing five (5) years from now? CHECK ONLY ONE.

I expect to be:

a. _____ Teaching in the same school system, same job.

b. _____ Teaching in the same school system, different job.

c. _____ Doing administration in the same school system.

d. _____ Teaching in a different school system, same job.

e. _____ Doing administration in a different school system.

f. _____ Teaching part-time.

g. _____ Leaving the labor force.

h. _____ Not in education at all, but in another type of work.

What kind of work? WRITE IN _____

i. _____ Returning full-time to university for more education.

If you checked "i" above, will you probably: CHECK ONE

j. _____ Return to teaching.

k. _____ Return to administration.

l. _____ Not return to education

22. In general, how much say or influence do you have over what the following persons or groups actually do on their jobs? CHECK ONE ON EACH LINE.

	A very great amount	A great amount	Some	A slight amount	None at all
a. The principal in your school	____	____	____	____	____
b. Officers of local MEA or MFT (not the building representatives)	____	____	____	____	____
c. Teachers in your building	____	____	____	____	____
d. The school board	____	____	____	____	____
e. The district superintendent	____	____	____	____	____
f. Department heads in your school	____	____	____	____	____
g. The principal's assistants	____	____	____	____	____
h. The building representatives of the MEA or MFT in your school	____	____	____	____	____

23. For each of the following persons or groups, how important is it that you maintain their good opinion of you and your professional accomplishments? CHECK ONE ON EACH LINE.

	Very great importance	Great importance	Some importance	Slightly important	Not important at all
a. The departmental chairman	____	____	____	____	____
b. Other teachers in my specialty	____	____	____	____	____
c. The district superintendent	____	____	____	____	____
d. The students	____	____	____	____	____
e. The principal in this school	____	____	____	____	____
f. Local MEA or MFT officials (not building representatives)	____	____	____	____	____
g. The school board	____	____	____	____	____
h. Friends who are not in education	____	____	____	____	____
i. Other teachers not in my specialty	____	____	____	____	____

24. Do you think the principal of your school has as much authority as he or she needs in regard to the following things? CHECK ONE ON EACH LINE.

	As much authority as he or she needs	Not as much authority as he or she needs
a. Deciding to take or reject new or transferred staff	_____	_____
b. Speaking to a staff member about being late or quitting early	_____	_____
c. Initiating action to remove unsatisfactory staff	_____	_____
d. Setting building policy to coordinate a smooth operation	_____	_____
e. Disciplining staff	_____	_____
f. Initiating action to promote staff	_____	_____
g. Granting a few hours off to staff	_____	_____
h. Changing staff procedures	_____	_____

25. To what extent are you eager to do the following? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. Obtain a teaching position which would pay more	____	____	____	____	____
b. Teach with less interference from my principal	____	____	____	____	____
c. Obtain a teaching position in a larger school	____	____	____	____	____
d. Become an official in my teaching organization	____	____	____	____	____
e. Obtain a teaching position in a better school	____	____	____	____	____
f. Obtain an administrative position in education	____	____	____	____	____
g. Become a principal at your present salary	____	____	____	____	____

26. To what extent are you active in your teacher organization? CHECK ONE.

a. _____ To a very great extent.

b. _____ To a great extent.

c. _____ To some extent.

d. _____ To a slight extent.

e. _____ To no extent at all

Now we would like a little background information.

27. How old were you on your last birthday? CHECK ONE.

a. _____ Under 26
b. _____ 26-35
c. _____ 36-45
d. _____ 46-55
e. _____ 56-65
f. _____ 66 or older

28. Are you presently taking or have you completed any college courses since last September, 1966? (Include summer school, extension courses and night school.) CHECK ONE. No _____ Yes _____

a. If yes, was this further education required by your contract? CHECK ONE.

No _____ Yes _____

29. What is the highest college degree you hold? (If you hold a degree not listed below, check the one that is most nearly equivalent to the one you hold. Do not report honorary degrees.) CHECK ONE.

a. _____ No degree
b. _____ A degree based on less than four years' work
c. _____ Master's degree
e. _____ Education Specialist
f. _____ Doctor's degree

30. Suppose you could go back in time and start college over; in view of your present knowledge, would you enter the field of education again? CHECK ONE.

a. _____ Definitely no
b. _____ Probably no
c. _____ Undecided
d. _____ Probably yes
e. _____ Definitely yes

31. Please indicate your sex and marital status. CHECK ONE.

a. _____ Man, unmarried. (Go to question 65)

b. _____ Man, married.

c. _____ Man, widowed, divorced, or separated. (Go to question 65)

d. _____ Woman, unmarried. (Go to question 65)

e. _____ Woman, married.

f. _____ Woman, widowed, divorced, or separated. (Go to question 65)

g. Is your husband or wife gainfully employed? CHECK ONE

1. _____ Yes; full-time employment.

2. _____ Yes; part-time employment.

3. _____ No, but draws retirement pay.

4. _____ No.

32. Which of the following most nearly describes your present position in this school? CHECK ONE.

a. _____ Classroom teacher, teaching all or nearly all subjects to one class.

b. _____ Classroom teacher, teaching a few subjects to several different classes.

c. _____ Classroom teacher, teaching many different subjects to several different classes.

d. _____ Specialist (e.g., librarian, counselor, nurse, psychologist, etc.) giving less than half-time to classroom teaching.

e. _____ Teaching principal.

f. _____ Other (please write in) _____

33. Are you certified to teach? CHECK ONE. _____ No _____ Yes

If yes:

My area of certification is in _____

34. Thinking about last year and this year only, have you taught a grade or subject at this school: CHECK ONE ON EACH LINE.

a. outside your major in college? No _____ Yes _____

b. outside your minor in college? No _____ Yes _____

If yes to either a or b, answer the following by writing in a number.

c. How many grades or subjects have you taught outside your major in college?

_____ grades or subjects outside my major.

d. How many grades or subjects have you taught outside your minor in college?

_____ grades or subjects outside my minor.

35. How many children do you have at each of the following age groups? Enter number for each category.

a. _____ Under 5 years of age

b. _____ 5-12 years of age

c. _____ 13-18 years of age

d. _____ Over 18 years old

e. _____ Total number of children

_____ CHECK HERE IF YOU HAVE NO CHILDREN.

36. What will be your gross salary for the school year 1967-68? Include extra pay for extra school duties.

Before taxes, my gross salary will probably be: CHECK ONE.

a. _____ Less than $6,000
b. _____ $6,000-$6,999
c. _____ $7,000-$7,999
d. _____ $8,000-$8,999
e. _____ $9,000-$9,999
f. _____ $10,000-$10,000
g. _____ $11,000-$11,999
h. _____ $12,000 or more

37. How many days were you absent from work during the 1966-67 school year? (Write in number)

_____ days absent

Thank you very much for contributing to this study. We would greatly appreciate here your comments on any points we have neglected or not emphasized enough.

APPENDIX B

PRINCIPAL QUESTIONNAIRE

EDUCATION ADMINISTRATION STUDY
Department of Sociology
Michigan State University

PRINCIPAL QUESTIONNAIRE

1. In how many other school systems have you worked previous to your present position? (write in number)
   _____ school systems

2. In how many different schools in the present system have you worked? (write in number) _____ different schools

3. What was the total number of years of full-time teaching experience you have had? (Consider counseling as teaching experience.) Put 0 if no experience. (write in number) I have had _____ total years of full-time teaching experience.

4. How many years have you been a school principal? (write in number)

   _____ years

5. How many years have you been principal of this school? (write in number)

   _____ years

6. Do you belong to any principal associations? CHECK ONE.

   _____ Yes _____ No

   If yes, which one(s)? Write in name(s).

   _____

   _____

   _____

7. How many professional conferences, conventions, and workshops have you attended since September, 1966? (write in number)

   _____

8. To what extent do you exchange information, opinions, and ideas about doing your job with each of the following? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. Member(s) of the school board	____	____	____	____	____
b. Other principals in your school district	____	____	____	____	____
c. Your department head(s)	____	____	____	____	____
d. Superintendent of schools	____	____	____	____	____
e. The superintendent's staff	____	____	____	____	____
f. The building representative of the MEA or MFT in your school	____	____	____	____	____
g. Your assistants	____	____	____	____	____

9. People remain in an occupation for many different reasons. How important are each of the following for your remaining in education administration? CHECK ONE ON EACH LINE.

	Very great importance	Great importance	Some importance	Slight importance	No importance at all
a. The students with whom I have contact in this school	____	____	____	____	____
b. The friendships I develop with the people at work	____	____	____	____	____
c. The opportunity to be creative and original in the work I do	____	____	____	____	____
d. My salary compared to others at my level of education	____	____	____	____	____
e. My present job in the light of my career expectations	____	____	____	____	____
f. The physical conditions under which I work	____	____	____	____	____
g. My work responsibilities	____	____	____	____	____
h. Educating the future generation	____	____	____	____	____
i. The opportunity to be a professional	____	____	____	____	____
j. The prestige and respect I receive from the community	____	____	____	____	____
k. Working with books and ideas	____	____	____	____	____

10. How satisfied are you with each of the following? CHECK ONE ON EACH LINE.

	Very greatly satisfied	Greatly satisfied	Somewhat satisfied	Slightly satisfied	Not satisfied at all
a. The prestige and respect I receive from the community	____	____	____	____	____
b. My work responsibilities	____	____	____	____	____
c. The relationships I have with my assistants	____	____	____	____	____
d. The amount of autonomy given me by the superintendent to do my job	____	____	____	____	____
e. The fairness with which duties are distributed in this school district	____	____	____	____	____
f. The students with whom I have contact	____	____	____	____	____
g. My teaching staff	____	____	____	____	____
h. The relationships I have with the superintendent's assistants	____	____	____	____	____
i. My relationship with the teachers' organization in this building	____	____	____	____	____

	Very greatly satis-fied	Greatly satis-fied	Some-what satis-fied	Slightly satis-fied	Not satis-fied at all
j. My salary compared to others at my level of education	____	____	____	____	____
k. The friendships I develop with the people at work	____	____	____	____	____
l. My present job in the light of my career expectations	____	____	____	____	____
m. My degree of freedom from school board interference	____	____	____	____	____
n. The adequacy of the assistance I receive from the superintendent's staff	____	____	____	____	____
o. The support I get from parents	____	____	____	____	____

11. In general, how much say or influence do each of the following persons or groups have over what actually goes on in your school building? CHECK ONE ON EACH LINE.

	A very great amount	A great amount	Some	A slight amount	None at all
a. Teachers in your school	____	____	____	____	____
b. The district superintendent	____	____	____	____	____
c. The school board	____	____	____	____	____
d. Officials in the local MEA or MFT (not the building representatives)	____	____	____	____	____
e. The PTA in your school	____	____	____	____	____
f. You, personally	____	____	____	____	____
g. Department heads in your school	____	____	____	____	____
h. The superintendent's assistants	____	____	____	____	____
i. The building representatives of the MEA or MFT in your school	____	____	____	____	____

Who actually has the most influence over the following types of decisions? CHECK ONE ON EACH LINE. In the last column, please put a letter (a-l) indicating your opinion about who should have the most influence over that decision.

	WHO ACTUALLY HAS THE MOST INFLUENCE												WHO SHOULD HAVE THE MOST INFLUENCE? (Write in the letter
TYPE OF DECISION	teacher (a)	teacher organization, e.g., MEA or MFT (b)	entire faculty of school (c)	faculty of a specific department (d)	committee of teachers appointed by the principal (e)	principal's assistant(s) (f)	principal (g)	administrative assistant(s) of superintendent (h)	superintendent (i)	State Dept. of Education (j)	school board (k)	parents (l)	
1. Selecting required textbooks													
2. Selecting supplementary reading matter													
3. Determining the required courses													
4. Hiring new teachers													
5. Giving permission to outside groups to speak to students													
6. Formulating instructional policy													
7. Promoting a teacher to department head or other supervisory position													
8. Determining the percentage of students to be normally passed, failed, etc. (grading curve)													

TYPE OF DECISION	WHO ACTUALLY HAS THE MOST INFLUENCE: teacher (a)	teacher organization, e.g., NEA or AFT (b)	entire faculty of school (c)	faculty of a specific department (d)	committee of teachers appointed by the principal (e)	principal's assistant(s) (f)	principal (g)	administrative assistant(s) of superintendent (h)	superintendent (i)	State Dept. of Education (j)	school board (k)	parents (l)	WHO SHOULD HAVE THE MOST INFLUENCE? (Write in the letter
9. Determining if a controversial teacher should be re-hired													
10. Determining whether a faculty member should have tenure													
11. Ruling on teacher(s) grievances													
12. Determining what concepts and values are to be taught in a particular course													
13. Determining methods a teacher should use													
14. Determining what courses are to be taught													

13. How frequently do the following events occur within your school building? CHECK ONE ON EACH LINE.

	Very frequently	Quite frequently	Somewhat frequently	Not too frequently	Not frequently at all
a. Teachers are pressured to join a professional organization against their will	____	____	____	____	____
b. School district rules are changed so often that one never really gets accustomed to anything	____	____	____	____	____
c. The superintendent stresses results rather than methods	____	____	____	____	____
d. Teachers' organizations interfere with administrative requirements	____	____	____	____	____
e. The loyalty of teachers to the administration is used as a criterion for promotion rather than their professional merits	____	____	____	____	____
f. The school board's competence to judge on many educational matters is questioned by the staff	____	____	____	____	____

	Very frequently	Quite frequently	Somewhat frequently	Not too frequently	Not frequently at all
g. The principal has to go through unnecessary channels to get something accomplished	____	____	____	____	____
h. Teachers' organizations interfere with teaching practices	____	____	____	____	____

14. In general, how much say or influence do <u>you</u> have over what the following persons or groups <u>actually do</u> on their jobs? CHECK ONE ON EACH LINE.

	A very great amount	A great amount	Some	A slight amount	None at all
a. Other principals in your school district	____	____	____	____	____
b. Officers of local MEA or MFT (not the building representatives)	____	____	____	____	____
c. The school board	____	____	____	____	____
d. The district superintendent	____	____	____	____	____
e. The superintendent's assistants	____	____	____	____	____

15. To what extent can you expect cooperation and support for your ideas about doing your job from each of the following? CHECK ONE ON EACH LINE

	To a very great	To a great extent	To some extent	To a slight extent	To no extent at all
a. Member(s) of the school board	____	____	____	____	____
b. Other principals in your district	____	____	____	____	____
c. Your department head(s)	____	____	____	____	____
d. Superintendent of schools	____	____	____	____	____
e. Officers of the local chapter of your teacher organization (not the building representatives)	____	____	____	____	____
f. Officer(s) of the PTA in your school	____	____	____	____	____
g. Parents of the children in your school	____	____	____	____	____
h. The superintendent's staff	____	____	____	____	____
i. The building representatives of the MEA or MFT in your school	____	____	____	____	____
j. Your assistants	____	____	____	____	____

16. Do you have as much authority as you need in regard to the following things? CHECK ONE ON EACH LINE.

	As much authority as I need	Not as much authority as I need
a. Deciding to take or reject a new or transferred employee	_____	_____
b. Speaking to a staff member about being late or quitting early	_____	_____
c. Initiating action to remove unsatisfactory staff	_____	_____
d. Disciplining staff	_____	_____
e. Initiating action to promote staff	_____	_____
f. Granting a few hours off to staff	_____	_____

17. For each of the following persons or groups, how important is it that you maintain their good opinion of you and your professional accomplishments? CHECK ONE ON EACH LINE.

	Very great importance	Great importance	Some importance	Slight importance	No importance at all
a. The departmental chairmen	____	____	____	____	____
b. My teaching staff	____	____	____	____	____
c. The district superintendent	____	____	____	____	____
d. The building representatives of the MEA or MFT in my school	____	____	____	____	____
e. The students	____	____	____	____	____
f. Other principals in this school district	____	____	____	____	____
g. The school board	____	____	____	____	____
h. Friends who are not in education	____	____	____	____	____
i. Local MEA or MFT officials (not building representatives)	____	____	____	____	____

18. To what extent are you eager to do the following? CHECK ONE ON EACH LINE.

	To a very great extent	To a great extent	To some extent	To a slight extent	To no extent at all
a. Obtain a position in education which could pay more	____	____	____	____	____
b. Administer with less interference from my school superintendent	____	____	____	____	____
c. Obtain a principal position in a larger school	____	____	____	____	____
d. Become official in principal organization	____	____	____	____	____

19. What do you actually expect to be doing five (5) years from now? CHECK ONLY ONE.

I expect to be:

a. _____ Doing exactly what I am now doing.

b. _____ Doing administration in the same school system, but at a higher level.

c. _____ Doing administration in a different school system.

d. _____ Leaving the labor force.

e. _____ Not in education at all, but in another type of work.

f. _____ Returning full time to university for more education.

If you checked "f" above, will you probably: CHECK ONE

_____ return to administration?

_____ not return to education?

20. To what extent are you active in your principal organization? CHECK ONE.

a. _____ To a very great extent.
b. _____ To a great extent.
c. _____ To some extent.
d. _____ To a slight extent.
e. _____ To no extent at all.

21. Who most encourages teachers in your school to use standardized exams for students? CHECK ONE.

a. _____ The district superintendent's office.
b. _____ The principal's office in this school.
c. _____ Many of the teachers in this school.
c. _____ Officials of the local teacher organization in this district.
e. _____ Absolutely no one encourages teachers to use standardized exams in this school.

22. About what percentage of teachers in your school use standardized exams for students? CHECK ONE.

a. _____ 0-20%
b. _____ 21-40%
c. _____ 41-60%
d. _____ 61-80%
e. _____ 81-100%

23. Does your school have a manual of rules or regulations which is to be followed seriously? CHECK ONE.

_____ Yes _____ No

If yes, who exerts most influence or has most say about what goes into the manual? CHECK ONE.

a. _____ The district superintendent's office.
b. _____ The principal's office in this school.
c. _____ Many of the teachers in this school.
d. _____ Officials of the local teacher organization in this district.

24. Are those who teach the same subject in this school required to follow the same kind of lesson plan? CHECK ONE. _____ Yes _____ No

If yes, who exerts the most influence or has the most say about what is to be included in the lesson plan? CHECK ONE.

a. _____ The district superintendent's office.

b. _____ The principal's office in this school.

c. _____ Many of the teachers in this school.

d. _____ Officials of the local teacher organization in this district.

25. About what percentage of teachers who teach the same subject in your school follow the same kind of lesson plan? CHECK ONE.

a. _____ 0-20%

b. _____ 21-40%

c. _____ 41-60%

d. _____ 61-80%

e. _____ 81-100%

26. Are teachers required to handle courses in such a way that a substitute can take over at a moment's notice without interruption? CHECK ONE.

_____Yes _____ No

If yes, who most encourages this requirement? CHECK ONE.

a. _____ The district superintendent's office

b. _____ The principal's office in this school

c. _____ Many of the teachers in this school

c. _____ Officials of the local teacher organization in this district

27. Are teachers required to plan their work so that most children taking the same course will cover the same material at the same time? CHECK ONE.

_____ Yes _____ No

If yes, who most encourages this requirement? CHECK ONE.

a. _____ The district superintendent's office

b. _____ The principal's office in this school

c. _____ Many of the teachers in this school

d. _____ Officials of the local teacher organization in this district

28. Do you have department chairmen in this school? CHECK ONE.

_____ Yes _____ No

If yes, how many department chairmen do you have? (write in number)

_____ department chairmen

29. Do you have administrative assistants in this school? CHECK ONE.

_____ Yes _____ No

If yes, how many administrative assistants do you have? (write in number)

_____ administrative assistants

30. How many different courses are offered in this school during the year? (e.g., English 1 & 2 are to be considered two different courses; French and Spanish are to be considered two different courses, etc.) (write in number)

_____ different courses are offered in this school during the year.

Now we would like a little background information.

31. How old were you on your last birthday? CHECK ONE.

a. _____ Under 26
b. _____ 26 -35
c. _____ 36-45
d. _____ 46-55
e. _____ 56-65
f. _____ 66 or older

32. Are you presently taking or have you completed any college courses since last September, 1966? (Include summer school, extension courses and night school.) CHECK ONE. _____ Yes _____ No

If yes, was this further education required by your contract?

_____ Yes _____ No

33. What is the highest college degree you hold? (If you hold a degree not listed below, check the one that is most nearly equivalent to the one you hold. Do not report honorary degrees.) CHECK ONE.

a. _____ No degree
b. _____ A degree based on less than four years' work
c. _____ Bachelor's degree
d. _____ Master's degree
e. _____ Education Specialist
f. _____ Doctor's degree

34. Suppose you could go back in time and start college over; in view of your present knowledge, would you enter the field of education again? CHECK ONE.

a. _____ Definitely no.
b. _____ Probably no.
c. _____ Undecided.
d. _____ Probably yes.
e. _____ Definitely yes.

35. How many children do you have at each of the following age groups? Enter number for each category.

a. _____ Under 5 years of age
b. _____ 5-12 years of age
c. _____ 13-18 years of age
d. _____ Over 18 years old
e. _____ Total number of children

_____ Check here if you have no children.

36. Please indicate your sex and marital status. CHECK ONE.

a. _____ Man, unmarried. (Go to question 65)
b. _____ Man, married.
c. _____ Man, widowed, divorced, or separated. (Go to question 65)
d. _____ Woman, unmarried. (Go to question 65)
e. _____ Woman, married.
f. _____ Woman, widowed, divorced, or separated. (Go to question 65

Is your husband or wife gainfully employed? CHECK ONE.

1. _____ Yes; full-time employment.
2. _____ Yes; part-time employment.
3. _____ No, but draws retirement pay.
4. _____ No.

37. What will be your gross salary for the school year 1967-68? Include extra pay for extra school duties.

Before taxes, my gross salary will probably be: CHECK ONE.

a. _____ Less than $6,000
b. _____ $6,000-$6,999
c. _____ $7,000-$7,999
d. _____ $8,000-$8,999
e. _____ $9,000-$9,999
f. _____ $10,000-$10,999
g. _____ $11,000-$11,999
h. _____ $12,000 or more

Thank you very much for contributing to this study. We would greatly appreciate here your comments on any points we have neglected or not emphasized enough.

APPENDIX C

CLUSTERED VARIABLES: TEACHER DATA

CLUSTERED VARIABLES: TEACHER DATA

Variable Name and Items Belonging to Cluster	Reliability Level
Extrinsic Reasons for Remaining in Teaching.	.74
1. Salary (relative to others with similar training)	
2. Physical conditions	
3. Duties besides teaching	
4. Teaching load	
5. Vacations	
Status Reasons for Remaining in Teaching.	.57
1. Opportunity to be a professional	
2. Prestige	
3. Career expectations	
Intrinsic Reasons for Remaining in Teaching.	.63
1. Students in this school	
2. Friendship with people at work	
3. Opportunity to be creative at work	
4. Educating the future generation	
5. Working with books and ideas	
Cooperation and Support Received from Outside This School.	.83
1. School Board	
2. Superintendent	
3. Teacher Organization	
4. PTA	
5. Parents	
6. Superintendent's staff	
Cooperation I Receive from Inside this School.	.74
1. Teachers in my specialty	
2. Department heads	
3. Principal	
4. Teachers outside my specialty	
5. Principal's assistant	

Variable Name and Items Belonging to Cluster	Reliability Level
Idea and Information Exchange with Outside Personnel.	.72
1. School board 2. Superintendent 3. Officers of Teacher Organization 4. PTA 5. Superintendent's staff	
Idea Exchange within My School	.60
1. Teachers outside my specialty 2. Principal 3. Principal's assistants	
Idea Exchange with Close Colleagues	.57
1. Teachers in my specialty 2. Department chairman	
Interference of Problems with Educational Objectives	.79
1. Collective negotiations changes principal-teacher relationship 2. Grievances change principal-teacher relations 3. Teacher organization requires too much involvement of teachers	
Interference of Outsiders with Education in School	.64
1. PTA criticism of classroom operations 2. Community criticism of school operations	
Satisfaction with Physical Job Characteristics	.71
1. Work load 2. Physical conditions 3. Class size	
Satisfaction with Non-Physical Job Characteristics	.66
1. Students in this school 2. Subjects I teach 3. Friendships at school 4. Present job in light of career expectations	

Variable Name and Items Belonging to Cluster	Reliability Level
Satisfaction with Authority Relationships	.69
1. My relations with Principal's assistants	
2. Autonomy from principal	
3. Distribution of duties in this school	
4. Relations with Superintendent's staff	
5. Adequacy of supervision from superintendent's staff	
Events occur--Poor Administration	.60
1. Rules change too frequently	
2. Principal emphasizes results not methods	
3. Promotion based on loyalty, not merit	
4. Unnecessary channels required for action	
Events occur--Principal Supports Faculty	.71
1. Principal protects faculty from parents	
2. Principal seeks staff approval on important matters	
3. Principal treats staff as equals	
Events Occur--Teacher Organization Hinders	.65
1. Teachers pressured to join against own will	
2. TO interfers with administrative requirements	
3. TO interferes with teaching practices	
4. Teachers pressured by peers-unwritten rules	
Own Influence Over Others	.83
1. Principal	
2. TO officers	
3. Other teacher	
4. School board	
5. Superintendent	
6. Department heads	
7. Principal's assistants	
8. Building representatives of TO	

Variable Name and Items Belonging to Cluster	Reliability Level
Concern for Opinions of Superiors and Clients.	.84
1. Superintendent	
2. Students	
3. Principal	
4. TO officials	
5. School Board	
Concern for Opinion of Close Colleagues	.61
1. Department chairman	
2. Teachers in specialty	
Concern for Opinion of Friends (not experts)	.56
1. Friends not in education	
2. Teachers not in specialty	
Anxious to Change Teaching Positions	.68
1. Position with more pay	
2. Teach with less interference from principal	
3. Teach in larger school	
4. Teach in better school	
Anxious to Move to Administration	.59
1. Become TO official	
2. Obtain administrative post in education	
3. Become principal at own salary	

APPENDIX D

CLUSTERED VARIABLES: PRINCIPAL DATA

CLUSTERED VARIABLES: PRINCIPAL DATA

Variable Name and Items Belonging to Cluster	Reliability Level
Principal's Experience	.87
a. number of school systems b. number schools this system where I have been principal c. years teaching experience d. years as principal in total e. years principal this school	
Exchange Ideas with Subordinates	.79
a. with assistants b. with department heads c. with teachers	
Exchange Ideas with Superiors	.72
a. with superintendent's staff b. with superintendent c. with school board	
Exchange Ideas with Colleagues	1.00
a. other principals	
Importance of Various Reasons for Remaining in Education--Importance of Students	.71
a. in this school b. educating future generations	
Importance of Intrinsic Factors	.66
a. being creative b. working with books and ideas	
Importance of Status	.68
a. opportunity to be a professional b. prestige	
Importance of Extrinsic Factors	.61
a. career expectations b. physical conditions c. work responsibilities d. friendships at work	

Variable Name and Items Belonging to Cluster	Reliability Level
Job Satisfaction	.87
a. satisfaction with students	
b. fairness of duties	
c. relationships with assistants	
d. work responsibilities	
e. prestige and respect	
f. physical conditions	
g. autonomy from superintendent	
h. teaching staff	
i. relationships with superintendent's assistants	
j. relationship with teachers' organization	
k. my salary compared to others at my educational level	
l. friendship with people at work	
m. my job in light of career expectations	
n. freedom from board interference	
o. adequacy of assistance from superintendent's staff	
p. support from parents	
Teacher Organization Interferes With Educational Objectives	.83
a. collective negotiation changing teacher-principal relationship	
b. grievances	
c. teacher organizations require too much involvement from teachers	
Community Interferes with Educational Objectives	.78
a. PTA criticism of classroom operations	
b. community criticism	
Poor District Administration	.65
a. rules changed too often	
b. superintendent stresses results rather than methods	
c. loyalty of teachers, not merit, used as basis for promotion	
d. staff questions school board's competence on educational matters	
e. principal must go through unnecessary channels to accomplish aims	

Variable Name and Items Belonging to Cluster	Reliability Level
Teacher Organization Impedes Teachers	.80
a. teachers are pressured to join unions against their wills b. teachers' organizations interfere with administrative requirements c. teachers' organizations interfere with teaching practices	
Own Influence over Others Outside School Building	.71
a. other principals in district b. officers of local MEA or MFT c. the school board d. district superintendent e. superintendent's assistants	
Cooperation with Teachers' Organization	.64
a. officers of local chapter b. building representatives of MEA or MFT	
Cooperation Expected Inside School	.62
a. from department heads b. assistants	
Cooperation Expected from Parents	.61
a. officers of PTA b. parents of children in school	
Cooperation from District Officials (Outside School)	.77
a. school board b. principals c. superintendent d. superintendent's staff	
Adequacy of Own Authority	.71
a. deciding to accept or reject transferred teacher b. speaking to staff about tardiness c. initiating action to remove unsatisfactory staff d. disciplining staff e. initiating action to promote staff f. granting a few hours off to staff	

Variable Name and Items Belonging to Cluster	Reliability Level
Importance to You of Opinions of Those Inside School (and Colleagues)	.84
a. my teaching staff b. building representatives of MEA or MFT c. students d. departmental chairmen e. other principals	
Importance of Opinions of Those Outside School Building	.82
a. district superintendent b. friends outside school c. school board d. local MEA or MFT officials	
Eagerness for Upward Career Movement	.71
a. obtain a better paying position b. less interference from superintendent c. obtain a principal position in a larger school d. become an official in principal organization	

APPENDIX E

CONTRACT PROVISIONS LIMITING AUTONOMY OR AUTHORITY

CONTRACT PROVISIONS LIMITING AUTONOMY

OR AUTHORITY

Limits on Teachers:

1. Teaching hours set.
2. Teachers must serve on at least one committee.
3. Teachers must attend a minimum number of faculty meetings.
4. Teachers must attend extra-curricular events.
5. Teachers are prohibited from leaving school before official end.
6. Teachers may be required to take an involuntary leave of absence.
7. Leave of absence rules explicitly limit conditions of leave.
8. Teachers may be required to product MD certificate for sick days.
9. Teachers must perform record-keeping.
10. Teachers must accept assignment to over-sized class.
11. Teachers must accept involuntary transfer--grievance is only option.
12. Non-teaching duties are explicitly spelled out.
13. Teachers are not permitted to tutor for payment.
14. Limits set on grievances: contractual obligations only.
15. Tenure decisions are not open to grievance.
16. Teachers must accept verdict of arbitrators.
17. Probationary teachers must permit teachers to observe class.

Limits on Board, Superintendent and Principals:

18. Arbitration is totally binding.
19. Only areas mentioned in contract as not subject to grievance can be dismissed by school board.
20. Time limits set for board's written responses to grievances.
21. Officials must post all job vacancies.
22. If qualified candidates apply, promotions or transfers of current employees are required.
23. Criteria for promotion and transfers must be formally described.
24. Reasons for failure of employee to get promotion or transfer must be given in writing if applicant requests this.
25. Teachers cannot be required to teach beyond regular work day.
26. Teachers must be given a free hour for lunch.

27. Teachers must be given preparation time free from other duties.
28. District officials cannot increase class sizes beyond certain limits.
29. Officials cannot require teachers to teach more than given number of classes.
30. Teachers must be assigned to courses in area of major or minor.
31. District officials can hire only teachers with at least bachelor's degree.
32. Discrimination on the basis of religion, race and sex is prohibited.
33. Officials must allow teachers to see their own personnel files.
34. Layoffs must follow priority established by teacher seniority.
35. Officials must not use principal's evaluation as basis for decisions on personnel.
36. No secret monitoring of classrooms is permitted.
37. Any discipline of teachers must be done privately.
38. Disturbed students must be removed from regular classrooms.
39. Board must pay legal fees of teachers accused of assault.
40. Board must support teachers' grading policy.
41. Limits set on the duties of supervising teachers.
42. Board cannot assign student teachers unless supervising teacher agrees.
43. Board must provide counsel for assaulted teachers.
44. Board must suspend students who assault teachers.
45. Board must follow policy in permitting teacher absences.
46. Board must pay teachers for attending workshops.
47. Board must present budget proposal to union before presenting it to public.
48. Board must present millage proposals to union before made public.
49. Board must adhere to set salary schedule for teachers.
50. Board must provide life insurance for teachers.
51. Limits are set on the number of leaves the board can grant per year.
52. Board must recognize catastrophes (i.e., snow days).
53. Board must provide for longevity pay.
54. Limits set on length of faculty meetings.
55. Limits set on material that can be put on teacher records.

Emphasis in Contract Provisions:

Professional autonomy, rights and protections:
55, 42, 41, 40, 39, 37, 36, 35, 33, 32, 31, 30, 28, 27

Benefits:

53, 52, 50, 49, 48, 47, 46, 45, 34, 29, 26, 25, 23, 22, 21, 13, 12

Board Authority:
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17

Safety:
44, 43, 39, 38

Conflict Resolution:
24, 20, 19, 18, 16, 15, 14