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Several determinants of the growth of bureaucracy in schools have been isolated. Proliferation of bureaucratic rules is directly related to the size of the school, but inversely related to socioeconomic status of the students. Also, as the proportion of female teachers in a department rises, the number of rules increases, even though more female teachers have tenure than males, and females have more teaching experience than males. Proliferation of rules is greatest in schools having a disparity between the socioeconomic status of the teachers and that of the students; rules are used in these schools to protect the organization from outside influences as well as to provide security for teachers and administrators. Bureaucratic rules are only one of several methods of control available to an organization. The history of the organization, the nature of the profession, the expectations of professionals, and their training may all play a part. It is strongly suggested that the use and acceptance of rules to control and coordinate actions may be peculiar to certain professions. (Author/DE)

BUREAUCRACY IN EDUCATION

BY JAMES G. ANDERSON

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Preface

Increasingly, professional activities are being carried on within complex organizations which are bureaucratically organized. These bureaucratically structured institutions in turn exercise a compelling but little understood, and therefore potentially detrimental, influence on these activities and on the professionals involved in them. Robert Presthus has underscored the impact of such organizations thus:

> Such organizations are more than mere devices for producing goods and services. They have critical normative consequences. They provide the environment in which most of us spend most of our lives. In their efforts to rationalize human energy they become sensitive and versatile agencies for the control of man's behavior, employing subtle psychological sanctions that evoke desired responses and inculcate consistent patterns of action. In this sense, big organizations are a major disciplinary force in our society. Their influence spills over the boundaries of economic interest or activity into spiritual and intellectual sectors; the accepted values of the organization shape the individual's personality and influence his behavior in extravocational affairs. . . . Big organizations therefore become instruments of socialization, providing physical and moral sustenance for their members and shaping their thought and behavior in countless ways.[1]

The universal appeal of the bureaucratic type of administration is evidenced by the variety of diverse institutions—industrial, voluntary, political, educational, religious, and governmental—which have adopted this structure. According to Max Weber,

> The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic mechanism compares with other

1. *The Organizational Society* (New York: Alfred A. Knopf, 1962), pp. 15–16.

> organizations exactly as does the machine with the non-mechanical modes of production.
>
> Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs—these are raised to the optimum point in the strictly bureaucratic administration, and especially in its monocratic form. As compared with all collegiate, honorific, and avocational forms of administration, trained bureaucracy is superior on all these points. And as far as complicated tasks are concerned, paid bureaucratic work is not only more precise but, in the last analysis, it is often cheaper than even formally unremunerated honorific service.[2]

Characteristic of bureaucratic administration is the superimposition of systems of authority, status, competence, and communications upon one another and the structuring of administrative offices in a hierarchical order. These systems create a distinctive social structure and psychological climate conducive to highly predictable behavior by individuals who constitute the administrative staff.

Within these organizations the problem of control is a direct outgrowth of the need to coordinate the activities of functionally differentiated subunits. Maintenance of a stable means of accomplishing goals in a changing environment requires an organizational structure that facilitates decisions concerning the activities of individuals and subunits pursuing independent goals. The administrative staff of an organization may resort to one or a combination of methods of control over its individual members. These are direct supervision, extensive professional training, performance measures, and rules.

Most compelling of all of the administrative mechanisms used to control individual behavior is the formal authority which is articulated through a body of bureaucratic rules. These rules, important structural variables within the organization, are used extensively to direct and control actions of subordinates by making explicit approved attitudes and behavior. They also impersonalize and make legitimate the exercise of authority by superiors and protect the organization and its members from outside influences which

2. *From Max Weber: Essays in Sociology,* trans. H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1958), p. 214.

might prove inimical to the organizational endeavor. In short, rules become the bearers of organizational authority for the institution.

However, in attempting to structure and impersonalize relationships so as to minimize the influence of the individual on the accomplishment of organizational goals, the groundwork is laid for dysfunction. These unanticipated consequences include alienation of highly trained professionals; undue emphasis on procedural matters and creation of a certain resistance to change; distortion of the professional-client relationship, with a resultant tendency to treat the public served in a formal, impersonal manner; development of a legalistic attitude toward the performance of official duties, avoidance of responsibility, and minimization of commitment to and involvement in the organizational endeavor; and the appearance of informal groups which attempt to influence policy within the organization. Traditionally, many of these dysfunctional elements have been viewed as direct outgrowths of the attempt to delineate authority and responsibility inherent in individual offices and to impersonalize relationships between members of the organization through a body of rules. The exposition in Chapter I of patterns of control and their consequences for organizations is the point of departure for subsequent chapters.

Much of the theory of the operation of bureaucratic constraints and their impact on members of organizations has not been substantiated empirically. Moreover, educational research has for the most part ignored the methodological advances that have taken place in the social sciences over the last two decades. In particular, survey research techniques are little understood and much maligned by those undertaking research in education despite their application to a wide range of empirical problems in the social sciences.[3] This study, which examines in detail the growth, functioning, and consequences of bureaucratic rules within the public schools, illustrates the analytical techniques that have been developed to analyze survey data. The design of the survey, the sampling techniques used, and the construction of scales and indices for

3. For a review of the application of survey research in sociology, political science, psychology, economics, anthropology, education, social work, and public health, see Charles Y. Glock (ed.), *Survey Research in the Social Sciences* (New York: Russell Sage Foundation, 1967).

many of the concepts discussed in the first chapter are described in detail in Chapter II.

In Chapter III the causes of bureaucratization and the consequent reliance on bureaucratic rules, to the detriment of professional expectations of autonomy, judgment, and individual responsibility, are examined. The findings suggest that rules are called upon to perform a number of diverse functions for the institution. They would appear to obviate the necessity for close supervision by providing administrators with an alternative means of directing and controlling the efforts of subordinates who are viewed as less competent, less experienced, or less committed to the organization than themselves. However, the extent to which bureaucratic rules are used in lieu of direct supervision, performance measures, or professional training appears to be highly dependent upon the nature of the professional service performed, the size of the organization, and the relationship established with the public served.

In the schools studied, control of instruction as exercised by rules appears to be affected by variables at four distinct organizational levels. Control of instruction is centralized in schools a substantial portion of whose student body comes from lower-class homes. Where the school's authority may be challenged and its competence questioned, as it has been in dealing with children from impoverished neighborhoods, rules may be called upon to perform a protective function. Also, school administrators may resort to rules in an attempt to ensure that the students attain some minimum level of accomplishment. At the organizational level, size appears to affect the complexity of the organization's structure, resulting in increased procedural specification through rules. Within departments the extent to which control is exercised over instruction is a function of the subject matter taught, the number of faculty members, and the proportion of female teachers in the department. Finally, the degree to which individual teachers are permitted to exercise discretion in instructional matters is directly related to their sex, tenure status, and teaching experience.

By far the most critical dilemma posed for the organization is how to reconcile the expectations of autonomy and individual

responsibility of highly trained professionals with the bureaucratic hierarchy's demand for centralized control. With more and more professionals working within bureaucratic settings, increased attention is being paid to the conflict which occurs between organizational demands and professional training and expectations.

Within highly structured bureaucratic institutions the role of the professional is drastically altered. Coming to the institution with expectations of independence and professional autonomy, he is required to conform to rules and operating procedures and to defer to hierarchical authority. Since the distribution of status, income, and other rewards is jealously monopolized by individuals high in the hierarchy, professionals may abandon their original orientation for a bureaucratic one which will be rewarded.

In Chapter IV the role played by bureaucratic rules in the conflict between bureaucratic authority and professional autonomy is examined in depth. Contrary to expectations, rules appear to mediate authority conflict, making the imposition of hierarchical authority more tolerable to professionals. By structuring relationships between superiors and subordinates and communicating to professionals what is expected of them, rules impersonalize the exercise of authority and reduce anxiety among members of the organization. In education rules may be particularly necessary because of the lack of accepted performance measures, difficulty in effectively supervising instruction, and varying degrees of professional competence among teachers trained in the various disciplines.

Of even greater interest are the findings concerning the effect of bureaucracy in the educational process reported in Chapter V. Analyses of data from junior high schools suggest that the impersonal treatment of students by teachers and teacher resistance to new instructional approaches may be unanticipated consequences of the socialization of new teachers who aspire to tenure and a career in the public school system. Both reactions may very well be the result of the present practice of requiring new teachers to serve a probationary period under the supervision of subject matter specialists.

Moreover, school size may affect instructional practices in a detrimental fashion. As schools enroll larger and larger numbers of

students, thus requiring enlarged instructional and administrative staffs, increased specialization results. Teachers are assigned to teach specific subjects at specific grade levels, often to students of about the same ability and background. Departmental duties are centralized and assigned to a department head responsible for supervising instruction. Extracurricular assignments are made. For many teachers such specification and specialization may destroy the meaning of teaching and render their jobs devoid of interest or challenge.

Finally, teachers in lower-class schools, who deal with children from a wide range of cultural backgrounds and abilities, attempt to personalize their teaching to a greater extent than their colleagues in middle-class schools. In middle-class schools the students' similar background and ability may lead to a more impersonal and traditional style of instruction aimed at the hypothetical average. The heterogeneous student body found in lower-class schools may encourage teachers to look for new approaches and new techniques.

The impact of variables at four levels of the organization—environmental, organizational, departmental, and individual—on the choice of means of control and the impact that such constraints have on members of the organization are re-examined in Chapter VI. The school's clientele—students and their parents—is viewed as having a dynamic effect on its authority structure as well as on instruction. In lower-class neighborhoods increased instructional prescription through rules results from administrators' attempts to protect the school against disruptive outside influences. Moreover, centralization of authority in instructional matters appears to be an effort to offset the affective relationships that such teachers establish with their students. In an attempt to prevent teachers from departing too far from universal norms and policies regarding instruction, school administrators seem to resort to the imposition of rules. The result is increased conflict with authority on the part of teachers, as manifested by dissatisfaction with administrative practices and increased sentiment in favor of unionization.

Another important factor that influences control in the schools is the ambiguous and esoteric nature of educational objectives in

the more academic subjects, which makes it difficult to determine the extent to which these objectives are attained by individual teachers. Lack of agreement on educational goals in certain subjects, then, may lead to increased specification of curricula and instructional techniques through rules.

Finally, it is suggested here that because of the perpetuation of the myth of equality between teachers and administrators, a myth strongly championed by the NEA-affiliated professional associations, and the failure to recognize the authority relationship that actually obtains between teachers and administrators, educational institutions have had recourse to ever more bureaucratic patterns of control. The advantages of utilizing alternative forms of control have been largely denied educational administrators.

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as an article entitled "The Teacher: Bureaucrat or Professional?" in volume 3 (Fall, 1967). I am grateful to the editors of the *Quarterly* for permission to reprint these selections here.

J. G. A.

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III

The Growth of Bureaucracy in the Schools

Bureaucratization

Max Weber[1] first analyzed historically the rise of bureaucratically organized institutions, the characteristics of which were outlined in Chapter I above. In summary, these are specialization of organizational roles, commonly termed "division of labor"; development of universalistic, rational rules that are impersonally enforced; and orientation of the organization to the achievement of specific goals in an efficient, rational manner.[2]

Other investigators, such as S. N. Eisenstadt,[3] have been concerned with the development of bureaucracy in Eastern and Western society. Their studies suggest that (1) institutions develop bureaucratic forms of administration when there evolve many functionally specific organizations extensively differentiated in terms of institutional roles and spheres of influence; (2) social roles are achieved and not ascribed through caste, class, or lineage; (3) numerous institutions arise to implement social, political, and economic goals which could not otherwise be achieved by the society; (4) the complexities and needs of the society create interdependence among its members for goods and services; and (5) resources (manpower, money, materials, power, and influence) are mobile and available to competing institutions. Bureaucratic organizations, then, represent the attempts of complex societies to

1. Weber, *The Theory of Social and Economic Organization.*
2. Peter M. Blau, *Bureaucracy in Modern Society* (New York: Random House, 1956). The author suggests three essential characteristics of bureaucratic organizations.
3. S. N. Eisenstadt, "Bureaucracy and Bureaucratization," *Current Sociology,* 7, no. 2 (1958):99-163; "Bureaucracy, Bureaucratization, and Debureaucratization," *Administrative Science Quarterly,* 4 (December, 1959):302-20. For a study of an Eastern bureaucracy, see Morroe Berger, *Bureaucracy and Society in Modern Egypt* (Princeton, N.J.: Princeton University Press, 1957).

compete for resources and to provide goods, services, and security for their members.

Peter Blau and W. Richard Scott define bureaucratization as the amount of effort that an organization expends in maintaining itself rather than in pursuing its objectives.[4] They have suggested that there is wide variation in the degree of bureaucratization within organizations, as evidenced by the administrative personnel, the hierarchy, and the rules and regulations. Increased bureaucratization within an organization appears to grow out of the impact of a number of forces upon it, forces which ultimately affect the accomplishment of its goals.

The extent to which organizations develop a bureaucratic form of administration appears to be determined by their relation to the external environment. Stanley Udy's study of the evolution of bureaucracy in nineteen non-industrial societies[5] suggests the order in which different characteristics may be introduced in the course of their development. First, a hierarchy must be present in which workers are dependent upon superiors for rewards. Money, goods, and status are allocated to lower subordinates by superiors in return for participation in the organization. Next, as the organization increases in size, a division of labor occurs and specialization increases. Third, an emphasis on performance criteria develops. Rewards for an individual's efforts become proportionate to his contribution to the organizational endeavor. Finally, the institutional roles of members of the organization become more and more sharply differentiated from their roles in other organizations and in society in general. This last phenomenon Udy terms "segmental participation."

An elaboration of rules and procedures may also occur as the administration attempts to eliminate uncertainty in day-to-day activities. They may be used to indicate preferred courses of action for members confronted with ever-changing problems. Michael Crozier's study of two bureaucratized forms of French public service[6] provides a good illustration. Men were recruited

4. Blau and Scott, *Formal Organizations,* p. 8.

5. Stanley H. Udy, Jr., "Bureaucratic Elements in Organizations: Some Research Findings," *American Sociological Review,* 23 (August, 1958):415-18.

6. Michael Crozier, *The Bureaucratic Phenomenon* (Chicago: University of Chicago Press, 1965).

through a competitive process. Detailed rules and regulations governed every aspect of their work. Positions were allocated strictly on the basis of seniority. Conflict occurred in the only area of uncertainty that management was unable to control, machine maintenance. Because of breakdowns, strife developed between engineers and managers.

Blau and Scott's study of social welfare agencies[7] also shows the role played by bureaucracy in producing predictable behavior. Two agencies were compared, one of which had developed a manual of procedures for case workers. In the agency with the procedures manual young workers depended much less on consultations with experienced personnel. Without such a guide case workers in the second agency, anxious to avoid mistakes for which they would be held accountable, sought advice concerning doubtful situations.

Increased bureaucratization within an organization may also result from a demand for control over its activities. Gouldner's study of managerial succession in a gypsum mine[8] provides an insight into the process of bureaucratization. A new manager charged with the responsibility of improving production resorted to increased supervision and establishment of rules and regulations in an attempt to deal with hostile employees and managers of questionable loyalty. When these measures met with resistance, bureaucratic controls were intensified. Gouldner termed the resulting situation "a punishment-centered bureaucracy."

Another factor seemingly leading to bureaucratization is complexity. Apparently, size alone does not produce a disproportionate number of administrative personnel, as evidenced by several studies.[9] On the contrary, Theodore Anderson and Seymour Warkov,[10] while demonstrating an inverse relationship

7. Blau and Scott, *Formal Organizations.*

8. Gouldner, *Patterns of Industrial Bureaucracy.*

9. For example, a study of manufacturing firms found no relationship between size and the number of administrative staff. See Alton W. Baker and Ralph C. Davis, *Ratios of Staff to Line Employees and States of Differentiation of Staff Functions* (Columbus: Bureau of Business Research, Ohio State University, 1954). A second study of German industrial firms found an inverse relationship; see Reinhard Bendix, *Work and Authority in Industry* (New York: John Wiley & Sons, 1956), pp. 221-22.

10. Theodore R. Anderson and Seymour Warkov, "Organizational Size and Functional Complexity," *American Sociological Review,* 26 (1961):23-28.

between size of hospital and size of administrative staff in Veterans Administration hospitals, found a direct increase in staff when size of staff and complexity of operation were compared. This finding is supported by that of Frederic Terrien and Donald L. Mills,[11] who compared size and administrative staff of school districts. They found a direct relationship between the two, which can also be explained in terms of complexity.

The relationship of the organization to the public served also appears to have a distinct bearing on the degree of bureaucracy within the organization. Two studies shed light on this influence. Katz and Eisenstadt[12] found that the relationship of immigrants to Israel with bureaucratic officials militated against the use of formal bureaucratic rules and procedures in dealing with them. Immigrants who did not understand the role of bureaucrats forced officials to develop special relationships with them. A number of the instructors sent to immigrant villages even became intermediaries between the government and the villagers.

Blau and Scott also observed[13] that the administration of the child welfare department of a county welfare agency was least bureaucratically administered. Case workers were selectively assigned, case loads were smaller, and clients were accorded more personal treatment than in the public assistance division. In attempting to account for this difference they noted the dependence of the former department on foster parents, which made case workers and administrators highly sensitive to their relationships with prospective parents, whereas the public served by the latter department was solely dependent upon the agency.

Moreover, the studies by Katz and Eisenstadt and Gouldner indicate that groups bound tightly together by mutual dependence, brought about in a number of cases by the presence of danger, are less likely to be bureaucratically organized. In these studies of an army combat unit and of a mine, superiors were somewhat dependent upon the performance of subordinates, which forced them to eschew bureaucratic authority exercised

11. Frederic W. Terrien and Donald L. Mills, "The Effects of Changing Size upon the Internal Structure of Organizations," *American Sociological Review,* 20 (1955):11-13.
12. Katz and Eisenstadt, "Some Sociological Observations on the Response of Israeli Organizations to New Immigrants."
13. Blau and Scott, *Formal Organizations,* pp. 77-79.

through rules and buttressed by punishment in favor of more personal, non-bureaucratic means of motivating behavior.

Udy's studies of the emergence of bureaucratically administered organizations in non-industrial societies,[14] however, pose an interesting dilemma in trying to understand increased bureaucratization. He suggests that specialization creates a need for coordination and direction, which gives rise to an administrative hierarchy. However, Blau and Scott reverse the relationship and suggest that hierachical differentiation may be the result of the status structure of the surrounding society.[15] For evidence they point to Udy's finding that hierarchy is more prevalent in organizations in which membership is ascriptive, based on kinship or status, than in those in which membership is contractual or voluntary.

At this point we can ask what elements lead to increased bureaucratization within organizations. (The studies cited earlier have suggested several.) What factors influence an organization's choice of a means of controlling the behavior of its members, specifically, to what extent are rules, rather than the other patterns of control discussed in the first chapter, used to control behavior of public school teachers in instructional matters? These questions will be explored in some detail below. The extent to which rules and regulations are used in the school will indicate the relative amount of bureaucratization or of effort devoted to maintaining organizational arrangements rather than to carrying on the instructional process.

Organizational and Environmental Influences on Bureaucracy

It was hypothesized that two factors related to the degree of bureaucratization within the school were the size of the student body and the students' socioeconomic status. Size was chosen as an important organizational factor and socioeconomic status as an influential environmental factor. Consequently, in order to ensure

14. Stanley H. Udy, Jr., "The Structure of Authority in Non-industrial Production Organizations," *American Journal of Sociology*, 64 (1959):582-84.
15. Blau and Scott, *Formal Organizations*, p. 210.

a representative sample of junior high schools with respect to these two characteristics, the school population was stratified according to size and socioeconomic level.

Upon examining the distribution of schools in the population (see Table 2), it appears that the two characteristics are related. The students in all but one of the schools with an enrollment of less than 500 are primarily from the lower class. At the other extreme, the larger schools—over 1,500 students—are attended almost exclusively by middle- and upper-class students. As a result, in analyzing the relationship of these two factors to the number of rules within the school, it is necessary to allow for interactions between size and socioeconomic status. It has been postulated that small schools will have fewer instructional rules and, at the same time, that teachers in schools attended by students from a low socioeconomic level will be subject to many rules. Because all but one of the small schools serve lower-class students, if each of the variables were handled separately, the two effects might cancel each other out and obscure any true difference. However, the small size of the sample, ten schools, and the fact that all possible combinations of size and socioeconomic status were not represented in it made it seem impossible to test for interactions using the present design. Therefore, the procedure followed was to examine the relationship between instructional rules and another measure of size, namely, the number of teachers in a department, while controlling for the socioeconomic level of the student body. Departments increase in size with student enrollment, but the number of teachers in a department is also indicative of other changes within the school, such as greater diversity of programs offered, more formal departmental procedures, and differential teaching assignments.

The relationship between rules and department size is shown in Figure 3. Kendall's partial rank correlation coefficient tau has been calculated as a measure of association between rules and department size and is 0.17.[16] This value is not appreciably different from the zero-order measure of 0.18, which is significant at the 0.109 level. This relationship indicates that, notwithstanding

16. Sidney Siegel, *Nonparametric Statistics for the Behavioral Sciences* (New York: McGraw Hill Book Co., 1956), pp. 213-29.

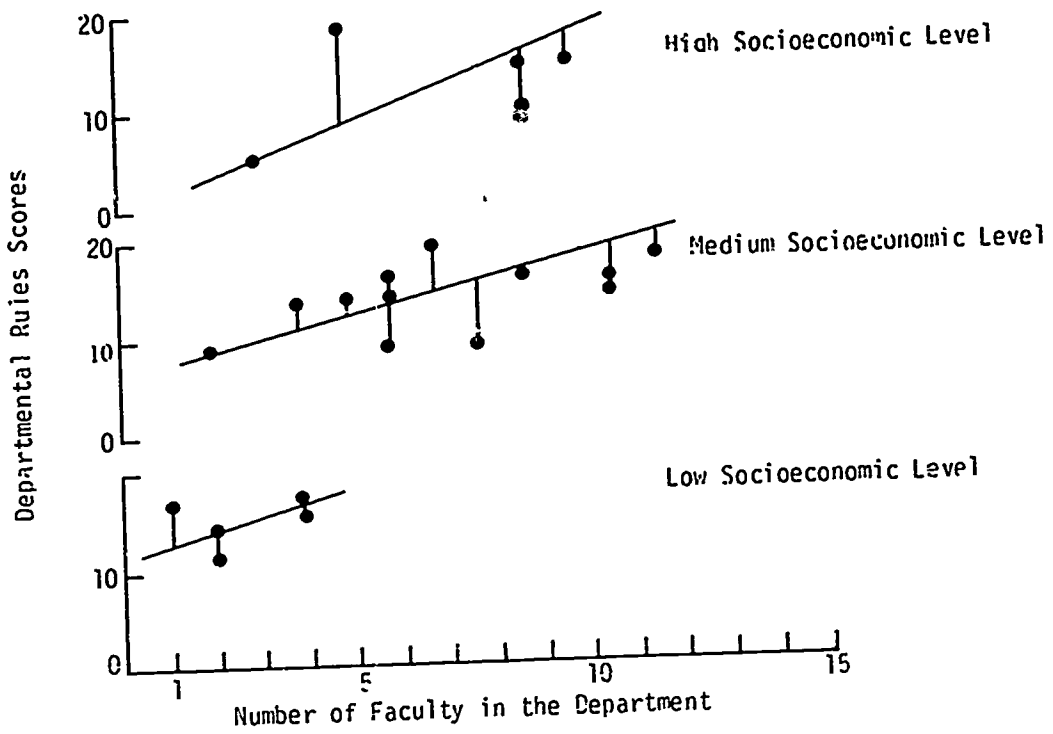
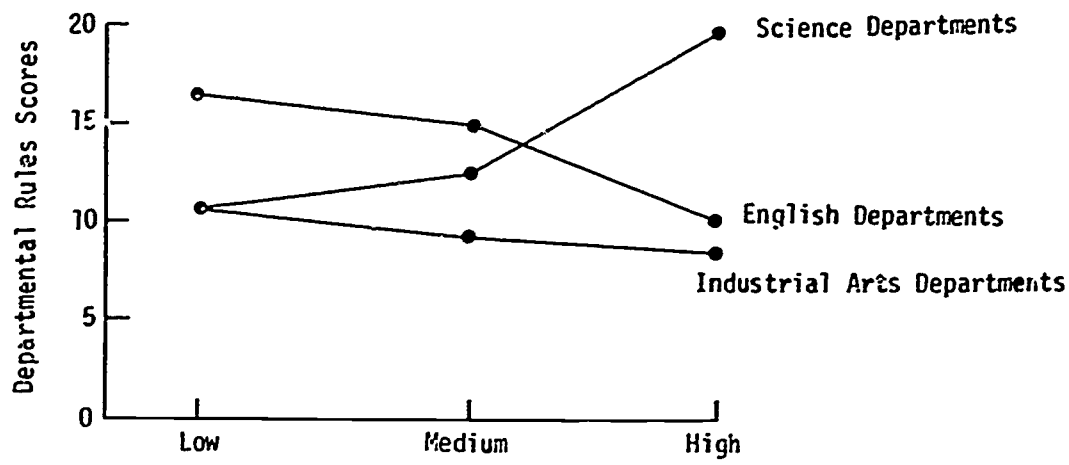


FIGURE 3. RELATIONSHIP BETWEEN LEVEL OF RULES AND SIZE OF DEPARTMENT, CONTROLLING FOR SOCIOECONOMIC LEVEL OF STUDENT BODY

the social class of the student body, teachers in large departments are on the average subject to the most control in instructional matters. Such control is accomplished through the enactment and enforcement of rules.

In order to examine the relationship between instructional rules and the socioeconomic status of the student body, departmental rules scores were examined in the three medium-size schools studied—those with 500 to 1,500 students. Figure 4 shows the scores for each department by socioeconomic level of the student body. In order to determine whether or not instructional rules vary with the change in background of the student body a two-way analysis of variance by ranks was performed, using Friedman's method.[17] By choosing only medium-size schools the effect of differences in school size was eliminated. Moreover, the two-way analysis of variance permitted control for differences in instructional rules resulting from differences in subject matter. The chi square value for Figure 4 is 24.66, which is significant at the 0.028

17. *Ibid.*, pp. 166-72.



Departmental Rules Scores			
English	17	15	10
Science	11	13	19
Industrial Arts	11	9	8

FIGURE 4. RULES SCORES FOR ENGLISH, SCIENCE, AND INDUSTRIAL ARTS DEPARTMENTS, CONTROLLING FOR SOCIOECONOMIC LEVEL OF STUDENT BODY AND SIZE OF SCHOOL: MEDIUM-SIZE SCHOOLS (500-1,500 STUDENTS)

level. As can be seen, regardless of the size of the school, English and industrial arts teachers in schools enrolling lower-class children are subject to a significantly more instructional prescription than are others.

The three science departments, however, reflect an opposite trend. Rather than decreasing with an increase in the socioeconomic level of the student body, departmental rules appear to increase. This finding reflects the effect of another variable, namely, the percentage of female teachers. In the next section it will be demonstrated that the level of departmental rules increases in direct proportion to the percentage of female teachers in the department. Since 0 per cent, 20 per cent, and 83 per cent, respectively, of the teachers in the three science departments represented in Figure 4 are female, the unexpected increase in rules in those schools enrolling children from a high socioeconomic level can thus be accounted for.

In general, these findings support two of the earlier hypotheses regarding the elaboration and use of rules in organizations: first, that the level of rules within the school will vary directly with the

size of the school; and second, that rules will vary inversely with the socioeconomic level of the community from which students are drawn.

As the number of students and faculty assigned to a particular school increases, it appears that the directional and decentralizing functions of rules come into play. The complexity of administration in schools where departments and classes are large, several academic programs are offered, and the problems of discipline and remedial work are accentuated may cause administrators to direct the teacher's actions through rules rather than direct explication and supervision. Because of the reduction in face-to-face contact between administrators and teachers, procedures are highly formalized and authority is decentralized through specification and rules.

The socioeconomic factor also seems to stimulate an increase in rules. Where there is a disparity between the cultural and ethical values of teachers and students, in the eyes of administrators this potential conflict may necessitate a more formal specification of instructional procedures, especially assignments, testing, and grading. This may represent an attempt to ensure a low rate of failure and retardation and prevent the frustration that leads to rebellion. In this situation rules also provide security for teachers, who are uncertain as to how much effort is required on their part. When instructional procedures are specified, the onus for failure of students to achieve is removed from the teacher. As long as he adheres to the curriculum guide and to accepted procedures, the blame can be shifted to the student or to the procedure, whichever is most expedient.

The final function that rules may perform in this instance is to reduce the discretion allowed teachers. The heterogeneity of the student body in lower-class schools substantially increases the complexity of administration and teaching. Children from all socioeconomic levels are represented in the student population, even though the majority are culturally deprived. Teachers are assigned classes containing students with a wide range of abilities, from academic to basic or terminal. The result is a wide range of textbooks, ability groups, curriculum guides, programs, etc. Less opportunity is given individual teachers for diversity and experi-

mentation, for some progress must be achieved, dropouts and retardation must be kept within bounds, and behavioral problems must be dealt with. In a situation as charged with anxiety and as characterized by complexity and heterogeneity as this, one would expect more rather than fewer rules circumscribing teacher behavior with regard to instruction.

Another factor reducing teacher discretion in lower-class schools is the element of urgency attached to the teaching situation, which is absent from middle- or upper-class schools. A high incidence of dropouts, disciplinary cases, home problems, absenteeism, and emotional disturbance adds up to a critical situation. A high rate of retardation, coupled with the ever-increasing number of children coming to junior high from the elementary schools, could swamp the school; on the other hand, a high rate of attrition through dropouts leads only to an increase in unemployment and delinquency. Much recent literature and experimentation has centered around the culturally disadvantaged. Administrators charged with the responsibility for dealing with this group may insist upon teaching methods which they believe will ensure success. For this reason as well, one would expect regulation of instructional matters to be increased.

The Influence of Sex on Organizational Control

Within the schools the sex of a teacher appears to be related to the discipline he chooses, the professional training he undergoes, and the length of his service. Sex is certainly a major determinant of a teacher's discipline. Women are concentrated in those disciplines which require the most academic preparation, are the most verbal, are socially oriented (as in the case of English), and whose instructional goals include citizenship training, communications skills, cooperativeness, cultural appreciation, etc. On the other hand, technical subjects like industrial arts, where the emphasis is on appreciation of practical manual skills, are exclusively the realm of the male teacher.

The data indicate that female teachers are more likely to obtain tenure status and to remain in the school system than men. Of female teachers 75 per cent are elected to tenure, as compared

with 65 per cent of males. Also, 69 per cent of the female teachers are high on the commitment index, which reflects experience, while only 65 per cent of the males have comparable scores. This finding is certainly not surprising, but it substantiates the hypothesis that women are more likely than men to make a career of teaching in the city. However, since two of the disciplines selected for study recruit almost exclusively from one sex, it is important to determine whether instructional rules are applied to male and female teachers equally.

Sex is related to departmental rules scores in Figure 5. It is evident that male teachers in general are subject to fewer rules than females. The chi square value for the contingency table is

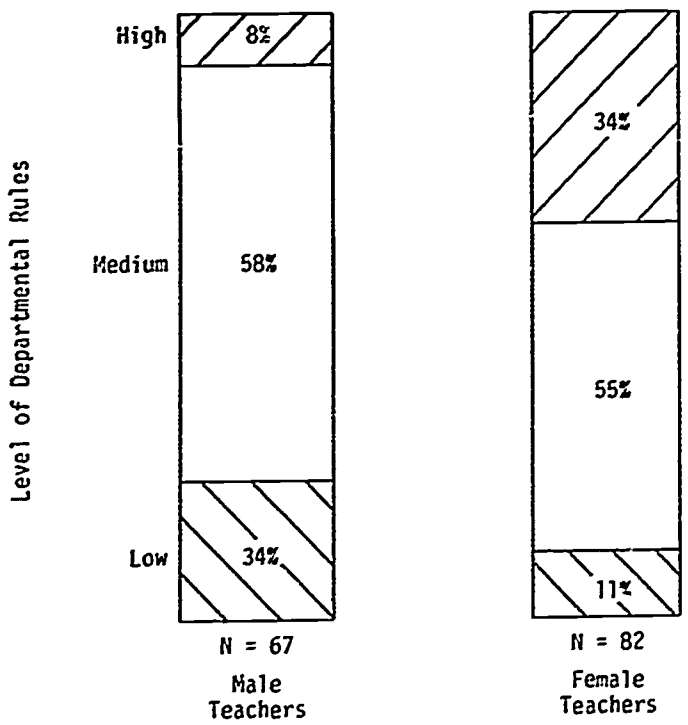


FIGURE 5. PERCENTAGES OF MALE AND FEMALE TEACHERS SUBJECT TO LOW, MEDIUM, AND HIGH LEVELS OF DEPARTMENTAL RULES

21.29, which is significant at the 0.001 level. However, in two of the departments selected, English and industrial arts, female and male teachers are disproportionately distributed, and it is necessary to examine the demonstrated relationship between the teacher's sex and the level of rules to which he is subject. This will

permit us to determine whether the differences in the levels of rules among departments is the result of the ratio of female to male teachers or of intrinsic differences among the disciplines. It can be shown that English and science departments are higher on the rules scale than industrial arts departments in every school but one (see Fig. 7). Because English departments are largely, and in some cases entirely, composed of women, while industrial arts departments are exclusively male, this may account for the finding that female teachers are subject to more rules than males.

In order to examine the plausibility of this explanation, it is necessary to examine departments in which the proportion of male and female teachers varies greatly (see Fig. 6). There is a

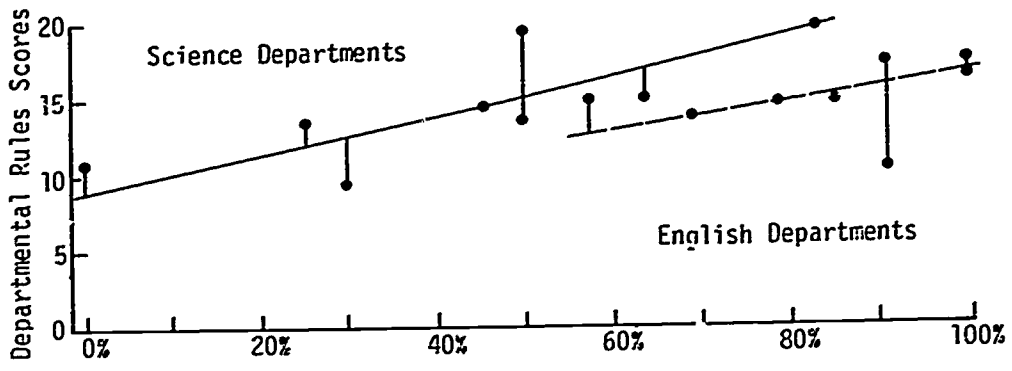


FIGURE 6. RELATIONSHIP BETWEEN RULES AND PROPORTION OF FEMALE TEACHERS IN ENGLISH AND SCIENCE DEPARTMENTS

significant relationship between the percentage of female teachers in a department and the degree of rules to which teachers are subject. Kendall's tau has been calculated as a measure of association between the two attributes. Tau is 0.38, which is significant at the 0.138 level, for English departments and 0.68, significant at the 0.016 level, for science departments. In this instance the significant positive relationship indicates that as the proportion of female teachers increases, the number of rules increases.

However, there may be another factor involved, the sex of the department head. Of the sixteen departments analyzed in Figure 6, all but one of those with a high level of rules (a score of 16 or

more on the rules scale) was headed by a woman. Rules thus may be useful when women administrators are dealing with women teachers. Female teachers have a tendency to become more involved personally with their students than male teachers, as will be demonstrated in a later chapter. If this tendency carries over into teacher-administrator relations, rules may be useful in impersonalizing these relations somewhat. Women teachers may be more willing to accept the impartial administrative authority of rules than the more subjective authority implied in direct supervision.

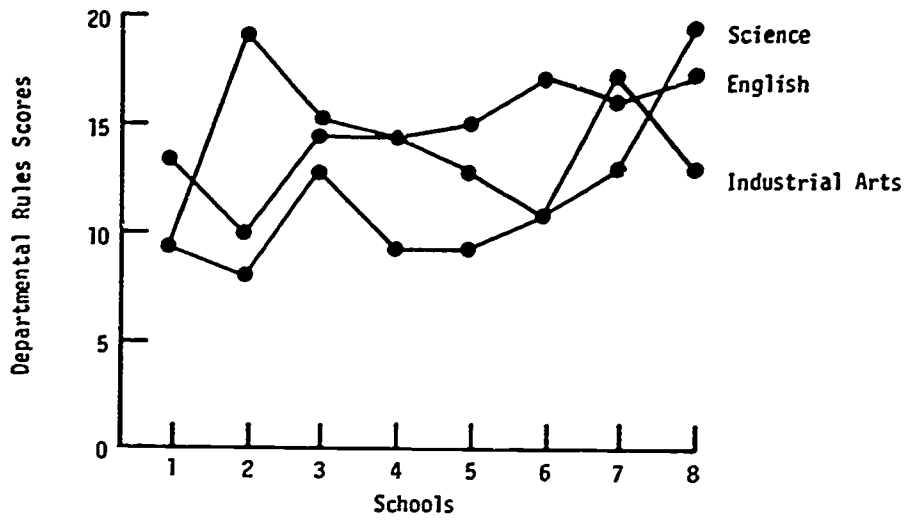
Professional Differences and Control

Three characteristics of a teacher's subprofession—the subject he teaches, his tenure status (which is an indication of professional competence as defined by the school system), and his teaching experience (which has been taken as an index of commitment)—have been studied here. The last two attributes are inextricably associated with his discipline or professional specialty and are known to vary significantly because recruitment, professional training, and expectations are a function of his subject. Consequently, the relationship of each of these factors to bureaucratic rules will be examined.

The Differential Use of Rules among Disciplines

First, in order to determine whether or not rules vary significantly among disciplines, a two-way analysis of variance by ranks was performed, using the techniques developed by Friedman. This design allows the investigator to compare several matched samples that are at least in an ordinal scale and to test whether they have been drawn from the same sample. Departmental scores on the rules scale are presented for each school in Figure 7.

In order to determine whether schools differ significantly with respect to rules, the eight values in each row were ranked from 1 to 8. If the null hypothesis is true and there is no relation between schools and rules, the eight rankings would be expected to occur equally often in the eight columns. If the null hypothesis is false,



	Departmental Rules Scores							
English	13	10	14	14	15	17	16	17
Science	9	19	15	14	13	11	13	19
Industrial Arts	9	8	13	9	9	11	17	13

FIGURE 7. RULES SCORES FOR ENGLISH, SCIENCE, AND INDUSTRIAL ARTS DEPARTMENTS IN EIGHT JUNIOR HIGH SCHOOLS

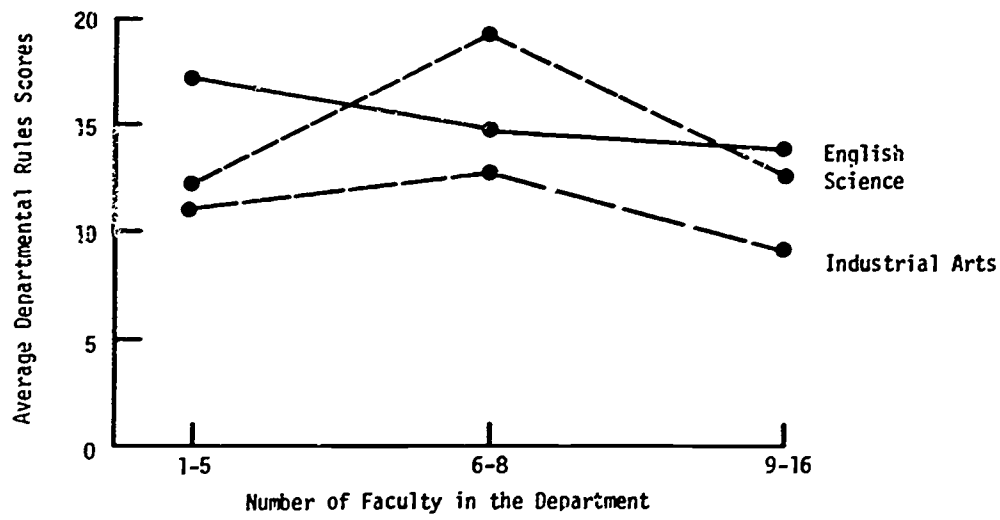
the column totals would be expected to vary. The significance of the variations among the column totals can be tested by determining the chi square value. The value obtained was 85.77, which is significant (well above the 0.001 level). Because use of a two-way analysis of variance has allowed the investigator to control for differences among departments, it is apparent that some schools score significantly higher on the rules scale than others.

Next, the same procedure was followed in ranking departments, while at the same time controlling for differences among schools in order to examine differences among disciplines. Chi square is 88.94 and is again significant, which indicates that there is variation among departments or disciplines on the rules scale independent of differences among schools. English and science departments are ranked highest, while industrial arts departments are ranked lowest.

In examining this variation in rules an indirect method must be used. Differences in rules among departments may be the result of the number of teachers and/or the proportion of male and female teachers within a department. However, intrinsic differences

among the disciplines are suspected. Each discipline has its own recruitment, training, and teaching methods. The professional training of science teachers in specific techniques and the more formal structure of scientific knowledge might lead one to expect more formalized instructional procedures in science departments than in English, where technique and approaches can be individualized.

Within schools, departments vary in size from one to nineteen faculty members. In one sense department size is related directly to the size of the school; however, it also depends upon the nature of the department. English departments in general are larger than science departments, which in turn are larger than industrial arts departments. It was thought that size alone might account for the fewer rules existing in industrial arts departments. The effect of this variable was determined by a two-way analysis of variance by ranks. Departments were matched on the basis of number of faculty members, and scores on the rules scale were compared for the three types of departments sampled. Figure 8 shows the relationship between rules and size of department. Chi square in this case is 28.67, which is significant at the 0.028



	Average Departmental Rules Scores		
English	17	15	14
Science	12	19	13
Industrial Arts	11	13	9

FIGURE 8. RULES SCORES FOR ENGLISH, SCIENCE, AND INDUSTRIAL ARTS DEPARTMENTS, CONTROLLING FOR SIZE OF DEPARTMENT

level. Because there are significant differences in rules even when department size is controlled, it can be concluded that other factors must be involved.

A second factor related to the level of rules is the proportion of female teachers. We have seen that as this proportion increases the number of rules increases. In addition to the sex effect on rules, however, there is another effect peculiar to the discipline (see Fig. 6): science departments appear to exercise more control over instructional practice than English departments, which in turn prescribe teacher behavior to a greater extent than industrial arts departments.

Figure 8, which relates rules to the number of faculty members in the department, appears at first to contradict this finding. English teachers appear to be subject to more rules than science teachers in departments of corresponding size. However, as Figure 6 demonstrated, English departments on the average have a higher proportion of female teachers, which leads to a higher level of rules. When the proportion of female teachers is taken into consideration, science departments on the average are more bureaucratic than the other two departments.

Since neither differences in size nor differences in the proportion of female teachers among departments totally account for the variation in instructional rules, it is concluded that intrinsic differences among the disciplines in professional training, expectations, and methods are somehow related to the degree to which rules are used to constrain and direct subordinates' behavior. For instance, English is a basic subject that is related to accomplishment in all other subjects. It is characterized by a high level of abstraction and is based to a large extent on verbal ability. Since many of the stated goals of the English program, e.g., citizenship training, acquisition of communications skills, and development of ability to work in groups, are vague and esoteric, it is possible that formal rules represent an attempt to direct teachers' actions to the accomplishment of these goals.

On the other hand, industrial arts programs are viewed as irrelevant to the child's education by many administrators, even though all students in junior high schools must participate in them. Each course in the industrial arts department is an entity in

itself and is not directly related to the student's academic work. Much of the work is concrete and manual. With students working on projects or drawings, it is easy to measure achievement in terms of finished projects or level of manual skills, and a complex system of rules is not necessary to guide teachers. Science departments at the junior high school level are characterized by a mixed faculty, while the subject matter is both abstract and concrete and has a certain relevance to the other courses that a child is taking. Rules, in this case, are extensive.

These findings support the hypothesis that rules will vary inversely with the routinizability of the activity in which the organization is engaged and with the specificity of goals. Where goals are vague and general, the administration may resort to rules for direction. In English and science departments adherence to the prescribed curriculum may be a means of informing teachers of what is expected of them in meeting the goals laid down by the school board. In industrial arts departments, where goals are concrete and results are easily measurable, as they are in mechanical drawing or metal shop, direction through rules is unnecessary. Professional training and experience is relied upon to a much greater extent.

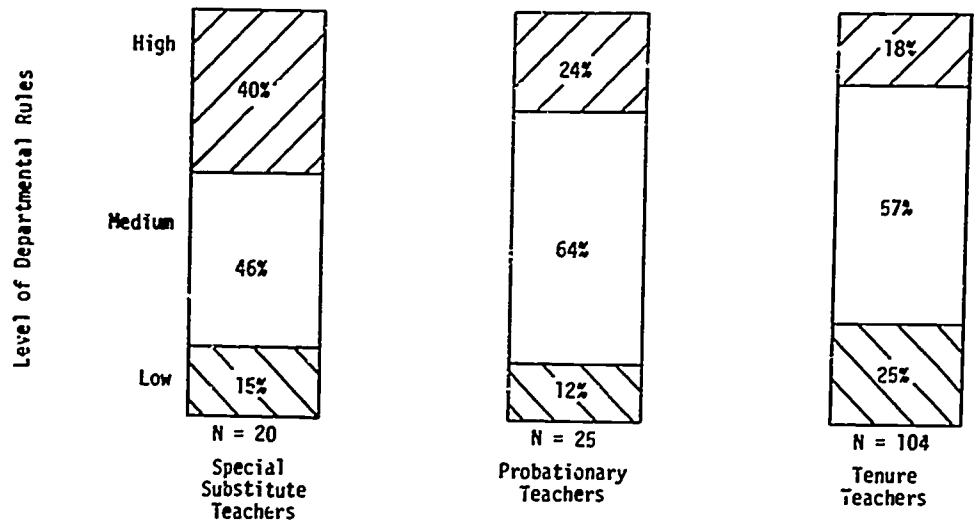
Teachers' Tenure Status and Departmental Rules

Another variable, hypothetically related to the degree of rules, is professional competence. Competence in this study is defined in terms of the school board's classification system. Three levels can be identified: tenure teachers, non-tenure or probationary teachers, and special substitute or provisional teachers. Teachers may be classified, then, according to their tenure status and the level of departmental rules to which they are subject. This classification is shown in Figure 9.

Gamma has been calculated as a measure of the degree of association between departmental rules and teachers' tenure status.[18]

18. Morris Zelditch, *A Basic Course in Sociological Statistics* (New York: Henry Holt & Co., 1959), pp. 180-86; James A. Davis, "Notes on Gamma: Interpretation, Computation, Partials, Multiples," mimeographed (Department of Sociology, University of Chicago, 1963); Leo H. Goodman and William H. Kruskal, "Measures of Association for Cross Classifications," *Journal of the American Statistical Association*, 49 (December, 1954):732-64; 54 (March, 1959):123-63; 58 (June, 1963):310-65.

Gamma for Figure 9 is -0.31 and is significant at the 0.05 level, which may be interpreted as meaning that if the level of rules



TEST FOR TRENDS

Source of Variation	Degrees of Freedom	Chi Square	Significance Level
Linear Regression	1	4.791	$P < 0.05$
Departure from Regression (Curvilinear)	3	1.589	N. S.
Total Chi Square Value	4	6.380	N. S.

FIGURE 9. RELATIONSHIP BETWEEN TEACHERS' TENURE STATUS AND DEPARTMENTAL RULES

existing in two departments is used to predict the order of two teachers' scores on the competence index, prediction of the correct order would be expected to be 31 per cent better than chance. It can also be interpreted as indicating that there is a negative association between rules and competence, that is, when one is high the other is low.

This relationship between levels of rules and professional competence can be further explored by performing a regression analysis and testing for linear and curvilinear trends in the data. If the data can be arranged so that there is some order to the classification categories, the over-all chi square value can be broken down into linear and curvilinear components.[19] In order to test for

19. For an excellent discussion of the use of the chi square test and methods for increasing its sensitivity, see A. E. Maxwell, *Analyzing Qualitative Data* (New York: John Wiley & Sons, 1961), pp. 63-72.

linearity, the regression of one of the variables on the other is calculated. Then the squares of the critical ratios obtained by dividing the regression coefficients by their standard errors are distributed as chi square with one degree of freedom. Furthermore, the curvilinear trend can also be tested for significance because the remaining portion of the over-all chi square value represents the departure from the regression line or the curvilinear trend (Fig. 9). It is evident that there is a significant linear trend in the data. This trend is linear rather than curvilinear because the curvilinear component is not significant. We can conclude that rules and competence are significantly related.

However, there are major differences among the three groups of teachers. Teachers with tenure can only be fired for serious cause. Ostensibly, they receive little supervision and are considered to be fully qualified. Probationary teachers usually lack only the residence requirement of two years of teaching experience within the system, they are heavily supervised, and they must be elected to tenure after a satisfactory probationary period. Special substitute teachers usually lack the certification requirements and, in many instances, are not college graduates. These teachers are assigned to classes only on a temporary basis until a qualified teacher becomes available. These differences would suggest a more detailed analysis of the relationship between competence and rules.

If Figure 9 is divided into four two-by-two contingency tables each with one degree of freedom,[20] even though the over-all chi square component is not significant, one or more of the components may reveal significant differences among the groups of teachers. Figure 10 shows the four tables that may be constructed from the data given in Figure 9. The components of the over-all chi square value associated with each of these two-by-two tables are also given.

Teachers with tenure are subject to significantly fewer instructional rules than other teachers, both probationary and special substitute. This statement is borne out by observations of instructional policy in the public school system. Tenure teachers have

20. *Ibid.*, pp. 52-62.

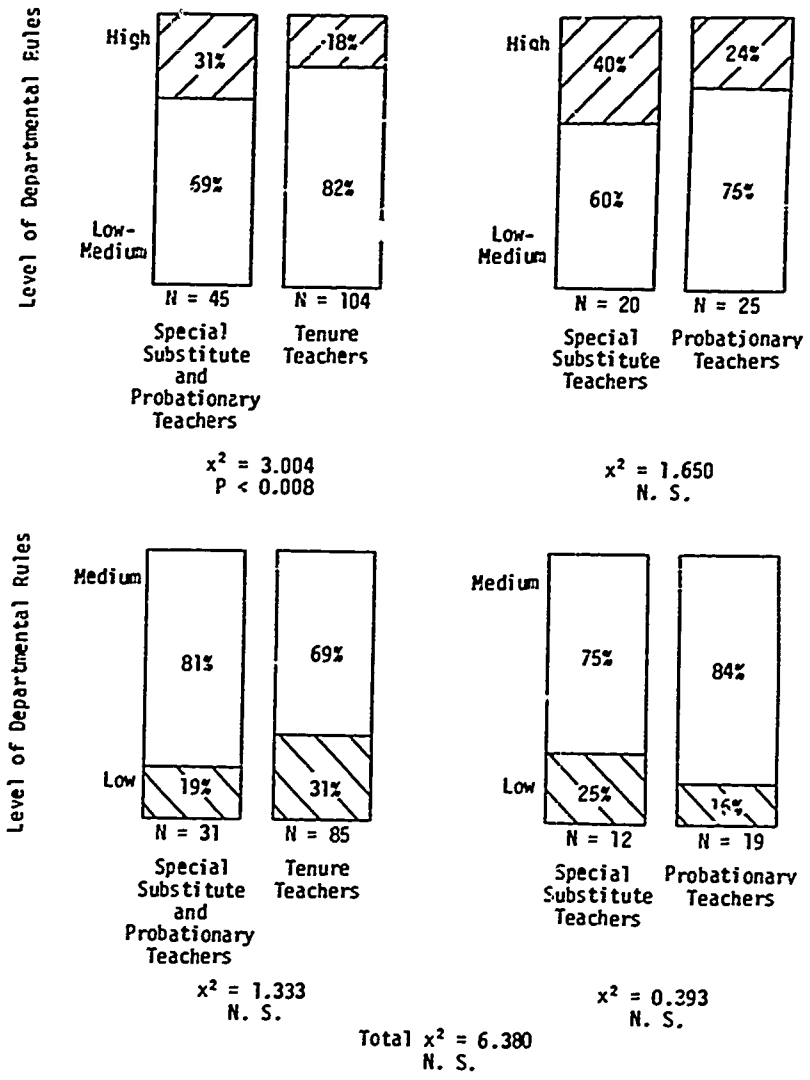


FIGURE 10. RELATIONSHIP BETWEEN TEACHERS' TENURE STATUS AND DEPARTMENTAL RULES: COMPONENTS OF CHI SQUARE

little supervision and can only be dismissed for cause, whereas the employment of other teachers is dependent upon their completion of degree and certification requirements and satisfactory performance during a probationary period of two years. Furthermore, little distinction is made among teachers who have not been elected to tenure status regardless of their differences in academic preparation and prior experience. Teachers without tenure are allowed little professional autonomy, and their actions are circumscribed by rules. It would appear that the imposition of instructional specification depends solely upon whether a teacher

meets the minimum requirements for tenure, rather than upon his competence or experience.

It has been demonstrated here that subject area, sex, and socioeconomic level of the student body affect the number of rules existing within a department. Since all of these factors appear to be related in some manner to tenure status, the index of competence in this study, it is necessary to determine whether they can account for the association between rules and competence. By recomputing the measure of association, gamma, while controlling for these other factors, we may determine whether the primary association is one between rules and competence alone or whether both factors are related to a third, such as sex.[21]

Two of these factors, subject area and sex, can be eliminated from consideration immediately, for we have seen that the largest proportion of teachers achieving tenure status teach English and are female–the two categories in which the most instructional rules are found. Consequently, neither of these factors can account for the negative association between rules and competence. The third factor, however, that might account for the association is the socioeconomic level of the student body. It may be hypothesized that, on the one hand, teachers with tenure are concentrated in schools serving a high socioeconomic level, where rules are found to be fewest. Teachers without tenure, on the other hand, would be expected to be concentrated in lower-class schools, where they would be subject to the most rules. If this is true, then socioeconomic status, a characteristic of the school's environment, would account for the apparent negative association between competence and rules. This possibility is analyzed in Figure 11. Departmental rules have been related to the teachers' tenure status, this time controlling for the socioeconomic level of the student body.

It is apparent from the figure that teachers with tenure in schools whose students are predominantly from a high socioeconomic level are permitted far greater autonomy than their colleagues who have not yet attained tenure. Also, as suspected,

21. For a good discussion of the introduction of additional variables to elaborate an analysis and to test for spuriousness, see Hyman, *Survey Design and Analysis,* pp. 242-331.

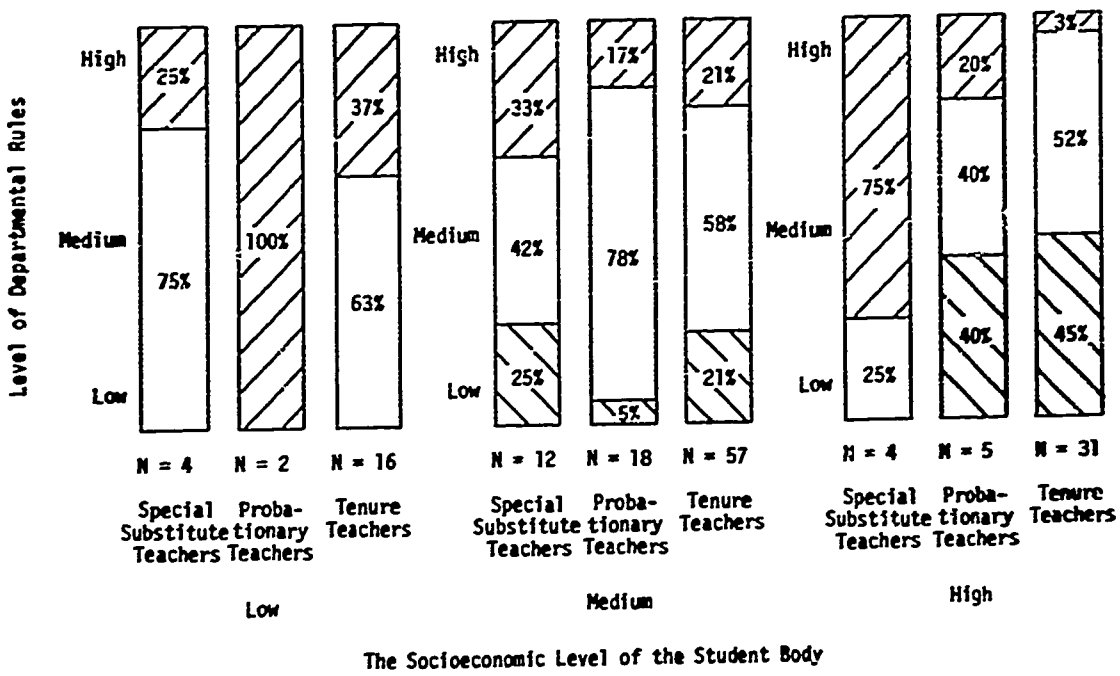


FIGURE 11. RELATIONSHIP BETWEEN TEACHERS' TENURE STATUS AND DEPARTMENTAL RULES, CONTROLLING FOR SOCIOECONOMIC LEVEL OF STUDENT BODY

teachers with tenure constitute much the highest percentage of the faculty of these schools. In schools with a lower-class student body the teacher's tenure status appears to have no bearing on the level of instructional rules. All teachers, regardless of professional training and experience, appear to be subject to the same degree of control. This finding again vividly demonstrates the effect of socioeconomic factors on the degree of control exercised in the school. This analysis is supported by recalculating gamma as a measure of association between rules and tenure status, while controlling for the socioeconomic level of the student body. The value obtained was -0.21, as compared with the zero-order measure of -0.31. Although the original measure of association has been reduced by the effect of the socioeconomic factor, it has not disappeared, suggesting that the tenure status of the teachers in a department does affect the level of rules.

One can conclude that the hypothesis relating rules to competence is borne out. There is a significant linear relationship between the index of competence and rules scores: one is high

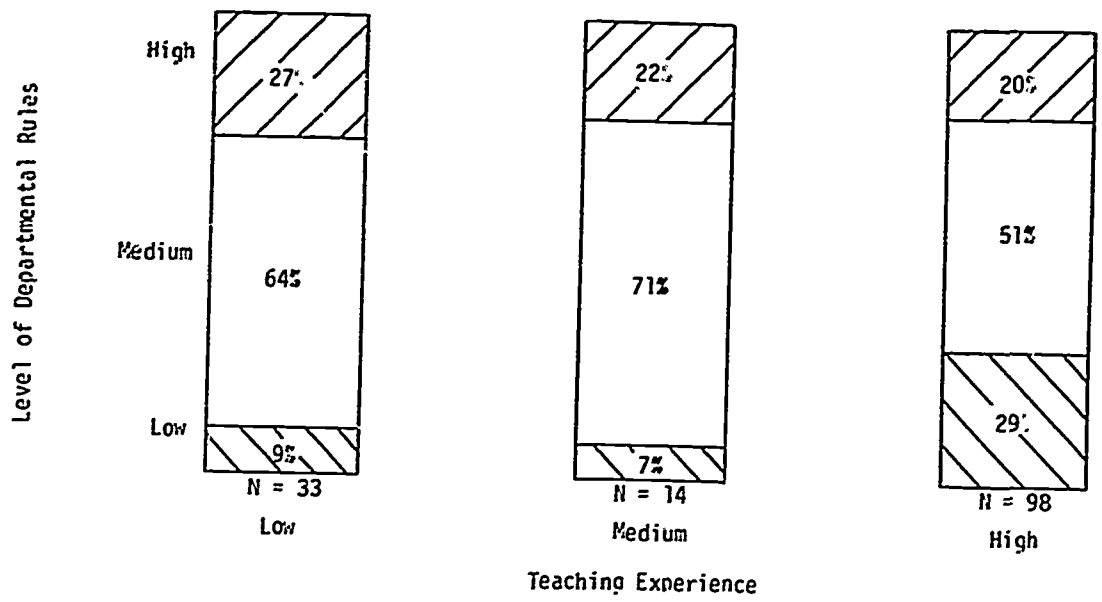
when the other is low. Furthermore, the zero-order association between these two variables is significant even when subject matter, sex, and socioeconomic level of the school are introduced as third variables. However, this relationship is conditional and only obtains in schools that enroll students from higher socioeconomic levels.

Teaching Experience and Departmental Rules

Several different indicators of bureaucratic commitment were included in the questionnaire. However, it was decided that only two would be used as an index, the total number of years taught and the number of years taught at the present school. This choice was suggested by the pattern of teacher mobility in the city. Because the children in the city schools are predominantly from lower-class families, there is a constant movement of teachers out of the city into the county school systems, where teaching assignments are more attractive and the salaries are higher. Also, because many of the junior high school students will drop out as soon as they reach the legal age to do so, teachers tend to gravitate to the senior high schools, where discipline is less of a problem and the curriculum is more challenging. Consequently, the assumption was made that those teachers who stay in the city and in the junior high schools are highly committed and dedicated.

Once constructed, this index can be related to the level of rules existing in the department, as shown in Figure 12. The association between these two variables may be found by calculating gamma. The value obtained is –0.32, significant at the 0.05 level. The negative association indicates that teachers with the most experience are subject to the fewest rules, as anticipated. As before, we can perform a regression analysis to test for significant trends. There is a significant linear association between commitment and rules: when one is high, the other is low.

It is possible to suggest several factors that might account for the apparent relationship between teaching experience and rules. One factor is differences among the subject areas. Fewer English teachers score high on the commitment index because English teachers in general have the least teaching experience. At the same



TEST FOR TRENDS

Source of Variation	Degrees of Freedom	Chi Square	Significance Level
Linear Regression	1	4.359	P < 0.050
Departure from Regression (Curvilinear)	3	3.355	N. S.
Total Chi Square Value	4	7.714	N. S.

FIGURE 12. RELATIONSHIP BETWEEN TEACHING EXPERIENCE AND DEPARTMENTAL RULES

time English departments have a relatively high level of rules. Industrial arts teachers tend to stay in the school system and at a given school longer than others. They score high on the commitment index and at the same time are subject to fewer rules.

Figure 13 shows the relationship between rules and teaching experience for English, science, and industrial arts teachers, respectively. As can be seen, on the average the science and industrial arts teachers with the most experience are subject to the fewest instructional rules. However, the decrease in rules with an increase in experience is not quite as pronounced when the teacher's discipline is taken into account. This is borne out by a partial gamma of -0.11, which provides a measure of the strength of the relationship between rules and commitment while at the same time controlling for the teacher's discipline.

It may seem curious that experience appears to have little effect on the level of departmental rules for English teachers and that all

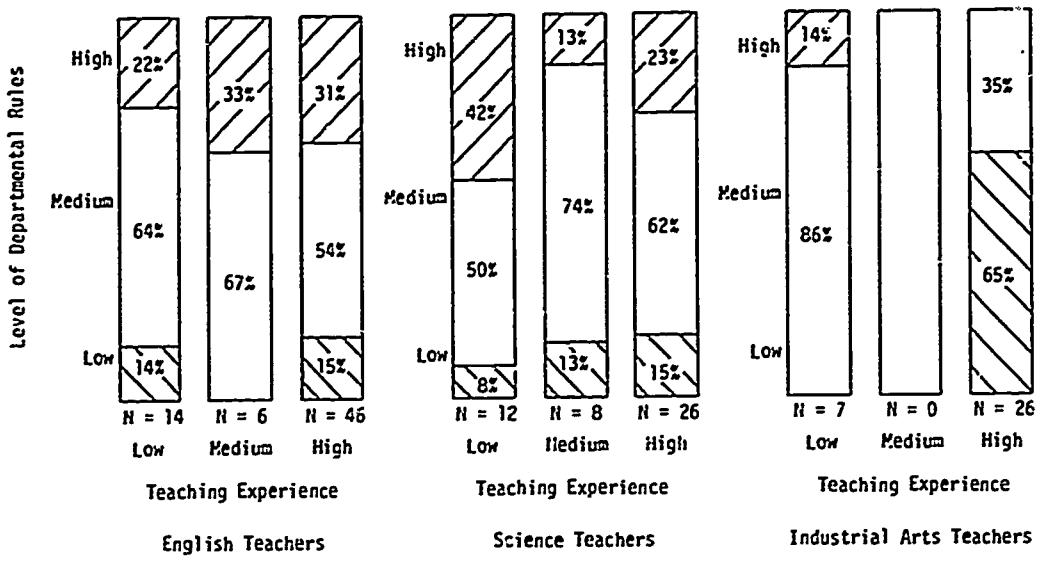


FIGURE 13. RELATIONSHIP BETWEEN TEACHING EXPERIENCE AND DEPARTMENTAL RULES: ENGLISH, SCIENCE, AND INDUSTRIAL ARTS

English teachers, regardless of experience, appear to be subject to roughly the same level of instructional rules. This is probably a reflection of the fact that those English departments with a high proportion of experienced teachers usually also have a high proportion of female teachers. The rather strong effect of sex on rules, demonstrated earlier in this chapter, would account for the higher degree of prescription through rules.

A strong relationship has been demonstrated between the socioeconomic level of the student body and rules. If, as has been argued here, teachers who stay in the school system leave schools in lower-class neighborhoods to move to other schools or other school systems, the disproportionate number of inexperienced teachers in lower-class schools where rules are most numerous would account for the relationship between teaching experience and rules.

Figure 14 shows the relationship between rules and experience in each type of neighborhood studied. The partial gamma is −0.19, a reduction of the zero-order measure of association. These data do indeed indicate that more experienced teachers tend to gravitate to schools in middle- and upper-class neighborhoods. Only 59

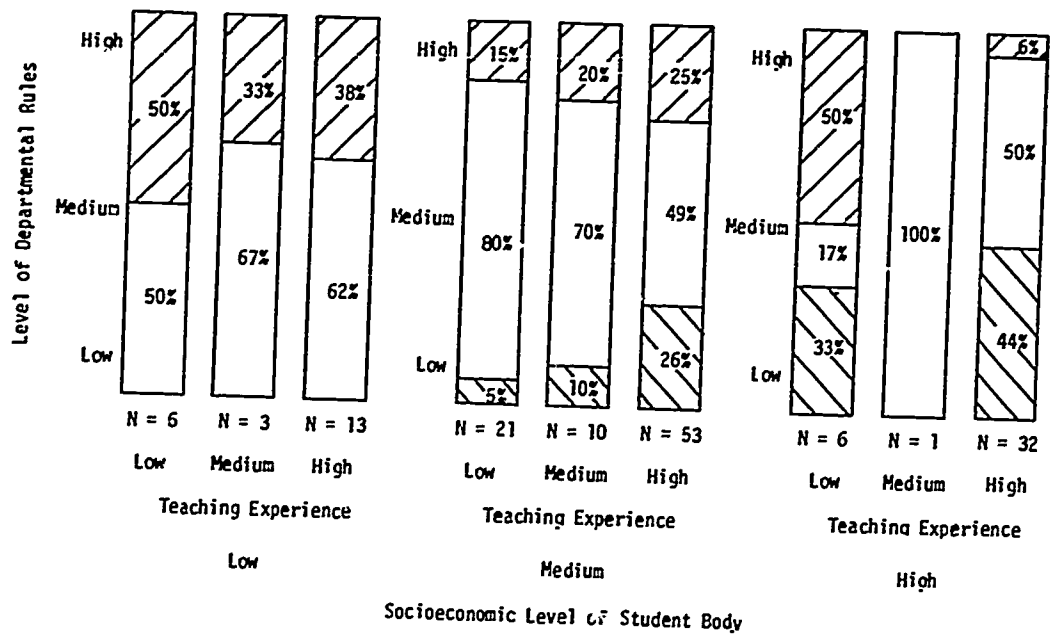


FIGURE 14. RELATIONSHIP BETWEEN TEACHING EXPERIENCE AND DEPARTMENTAL RULES, CONTROLLING FOR SOCIOECONOMIC LEVEL OF STUDENT BODY

per cent of the teachers sampled from schools in lower-class neighborhoods obtained high scores on the commitment index, as opposed to 82 per cent in upper-class schools. Schools whose students are predominantly from lower-class neighborhoods have a high level of instructional rules, regardless of the teachers' experience. The level of departmental rules varies with the experience of the staff in middle- and upper-class schools, suggesting that the amount of control exercised depends upon the experience of the teachers in a department but that when dealing with lower-class children teachers are permitted least discretion.

Determinants of Bureaucratic Rules

Figure 15 below indicates the determinants of rules that have been identified. The effect of each will be summarized here.

The organizational variable included in this study—size—has a bearing on the rules within organizations. Because close supervision by administrators is not possible as the organization increases in size, and because of the difficulties in comprehending the multiplicity of technical skills necessary in a large organiza-

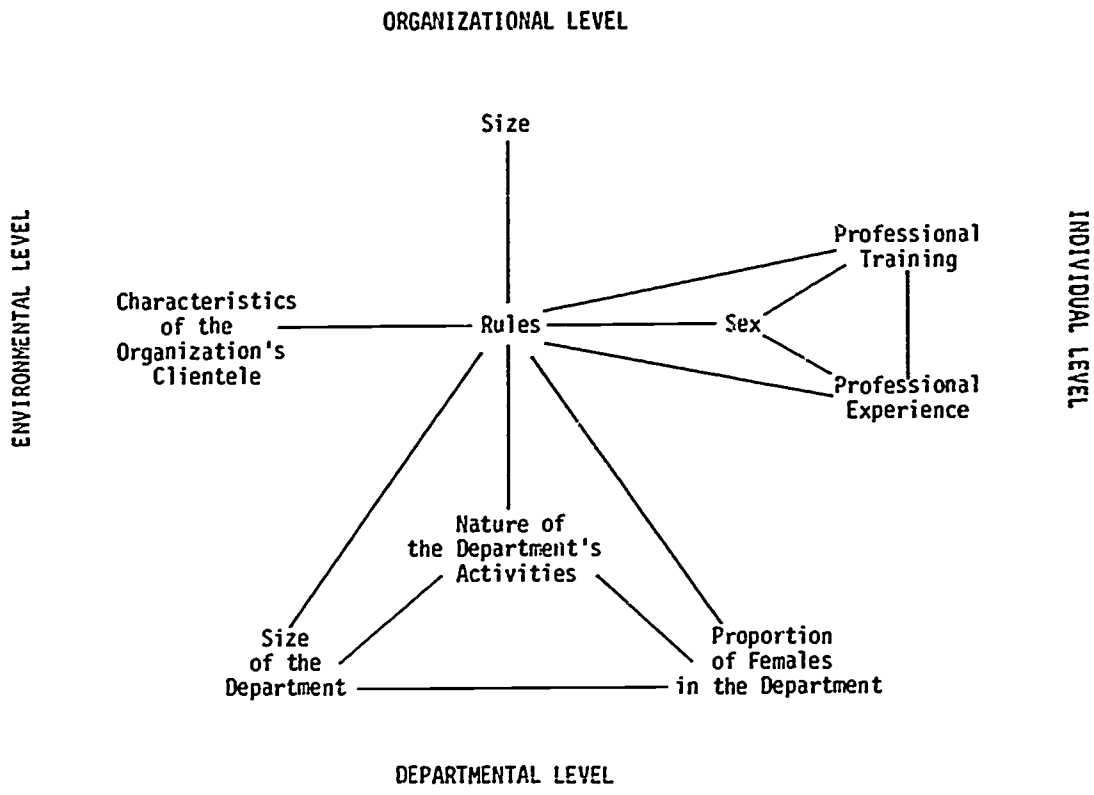


FIGURE 15. DETERMINANTS OF BUREAUCRATIC RULES AT FOUR ORGANIZATIONAL LEVELS

tion, administrators are forced to call upon rules to direct action, to impersonalize, decentralize, and legitimate authority, and to restrain individual acts which might prove inimical to the organizational endeavor. Close supervision is difficult and undesirable if resented by employees, and rules may offer administrators a compelling alternative.

Furthermore, in a very real sense rules stabilize and hold together the elaborate, complex systems of authority, status, and technical skills which constitute modern bureaucratic organizations, as shown in Figure 16. Individuals are highly mobile within organizations; organizations recruit or train them to fill specific positions. Rules reduce uncertainty by eliminating, as far as possible, the influence of individuals and creating a fairly permanent and predictable structure of relationships independent of the occupant of a given position.

In addition, rules may be used to create desirable expectations of authority, responsibility, and status, which an individual

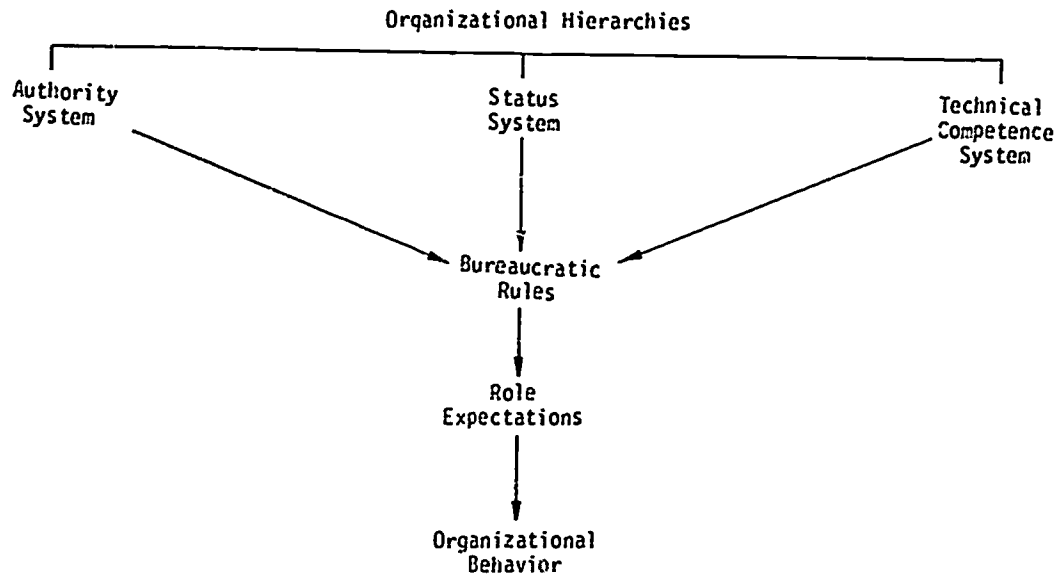


FIGURE 16. BUREAUCRATIC RULES AS ARCHITECTS OF ORGANIZATIONAL STRUCTURE

inherits along with a particular position in the hierarchy. By carefully delineating the perquisites of office, rules prevent the appropriation or pre-emption of authority and status beyond what is required to carry out the duties of that office. Through the provision of contingent patterns of action, they ensure that individual responses to new problems will be consonant with the policy laid down by the management, and they discourage abridgment of that policy. The anxiety created by fear of disapproval and punishment becomes a powerful inducement for individuals to conform to organizational strictures.

Organizational size affects a number of other bureaucratic dimensions, as demonstrated by Hall[22] and Doris Entwistle and John Walton[23] in studies of educational and industrial institutions. These studies indicate that hierarchy of authority, division of labor, procedural specification, technical qualifications, and span of control all vary with size. One might easily conceive of a number of these structural characteristics as intervening variables

22. Hall, "Intraorganizational Structural Variation: Application of the Bureaucratic Model"; "The Concept of Bureaucracy: An Empirical Assessment," *American Journal of Sociology,* 69 (July, 1963):32-40.

23. Doris Entwistle and John Walton, "Observations on the Span of Control," *Administrative Science Quarterly,* 5 (March, 1961):522-33.

between size and bureaucratic rules, as shown in Figure 17. At present, additional research is sorely needed to illuminate this effect.

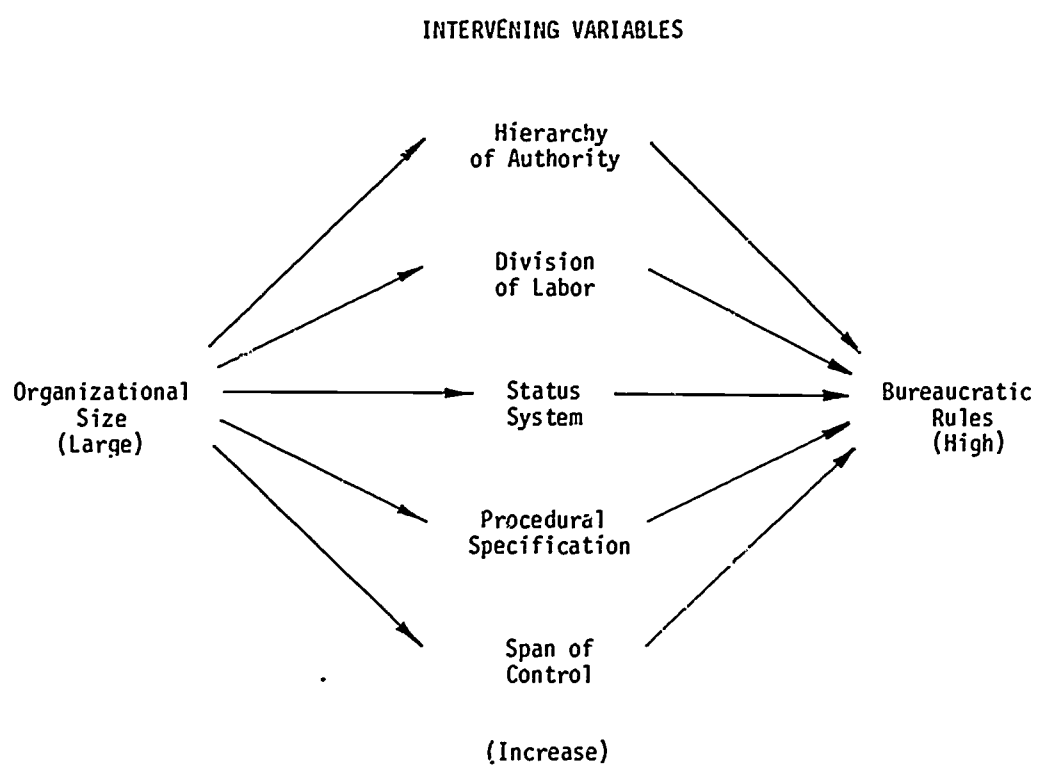


FIGURE 17. ORGANIZATIONAL SIZE AS DETERMINANT OF BUREAUCRATIC STRUCTURE

Clark's studies of adult education in California[24] and of junior colleges[25] indicate that environmental factors, such as the type of clientele, sources from which employees are drawn, service orientation, and presence or absence of support by professional groups, profoundly affect the structure and character of an institution. Public agencies such as schools and welfare departments may be more oriented toward the nuances of individual and public opinion and more vulnerable to outside influences than are private business and industry. In turn, such influences affect the rules circumscribing employees, as shown in Figure 18.

The present study has indicated that teachers in schools in which there is a disparity between their socioeconomic level and

24. Clark, *Adult Education in Transition.*
25. *The Open Door College* (New York: McGraw-Hill Book Co., 1960).

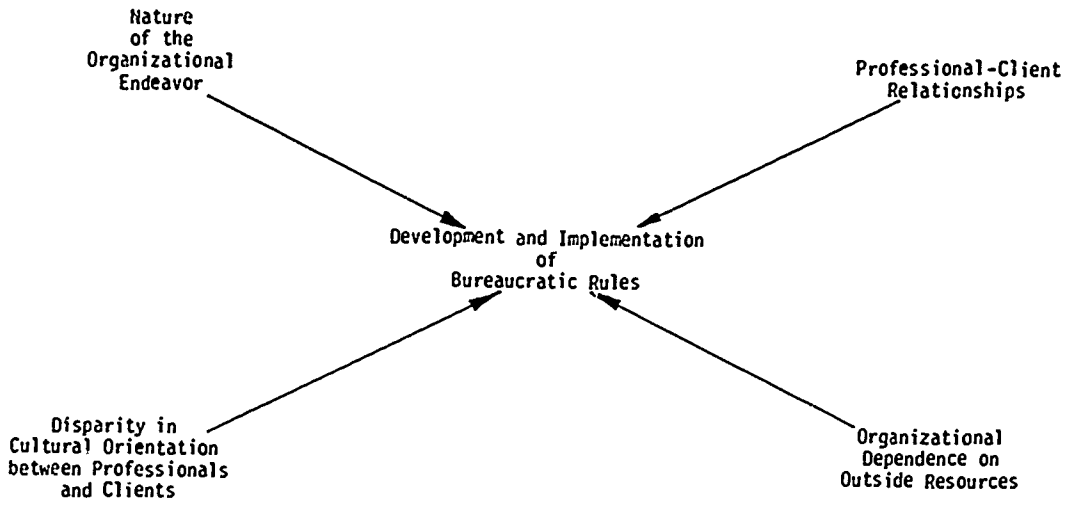


FIGURE 18. IMPACT OF ORGANIZATIONAL ENVIRONMENT ON BUREAUCRATIC RULES

that of the students are subject to most rules, regardless of tenure status and teaching experience. In these schools rules may be called upon to protect the organization from outside influences as well as to provide security for individual teachers and administrators responsible for accomplishing educational goals. Categories may be developed for handling individuals who pose problems or who find organizational decisions unacceptable. Subordinates then have recourse to the authority and prestige institutionalized in rules. The argument that the subordinate is only obeying rules laid down by the school board or the superintendent cuts off discussion in most cases. Both superiors and subordinates are simply doing their jobs, obeying the rules.

The nature of the interaction between professionals and clients may influence not only the number, however, but also the implementation of rules. Harold D. Lasswell and Gabriel Almond, in their study of a government agency,[26] felt that the differential application of rules to welfare recipients which they observed was related to the interaction between case workers and applicants and could only be explained on the basis of personality factors. Aggressive relationships between case workers and the public

26. Harold D. Lasswell and Gabriel Almond, "The Participant-Observer: A Study of Administrative Rules in Action," in *The Analysis of Political Behavior,* ed. Harold D. Lasswell (New York: Oxford University Press, 1949), pp. 261-78.

evoked widely varying responses on the part of those responsible for enforcing organizational rules. Here both case workers and supervisors waived rules at their own discretion. The exercise of such discretion becomes a means of bargaining, in this case not only for superiors with subordinates, but for employees with persons dependent upon the organization. This prerogative itself becomes a source of power and status for lower subordinates in the performance of functions which would otherwise be routine and monotonous.

Studies by Blau and Scott and by Katz and Eisenstadt, described earlier, also point to the pervasive effect that environment has upon the functioning of organizations. So far these studies have only been concerned with public institutions. A comparative study of several types of public and private organizations with quite different clienteles is needed to illuminate this important influence.

The most interesting determinant of instructional rules, however, is the proportion of female teachers in a department. As this proportion rises, the number of rules increases, even though more female teachers have tenure than males, and females have more teaching experience than males, both of which variables were generally found to be negatively associated with rules. This finding may be useful to organizations and subdivisions staffed wholly or in part by women, such as primary and secondary schools, whose teachers have traditionally been women.

On the other hand, this sex difference suggests that other individual characteristics not included in this study, such as temperament and emotional makeup, may be related to the development of rules within organizations. The impact of personality on the bureaucratic structure, indicated by Lasswell and Almond, has not been recognized hitherto, although organizational theorists have dealt extensively with its opposite, namely, the impact of the bureaucratic structure on personality.[27]

Organizations may choose among bureaucratic rules, direct supervision, self-enforcing performance measures, and professional

27. See especially Presthus, *The Organizational Society,* and Merton, "Bureaucratic Structure and Personality."

training to direct individual behavior, and it is not clear why one organization relies on one mechanism while another relies on a different one. The history of the organization, the nature of the profession, the expectations of professionals, and their training may all play a part. Professional differences appear to influence the choice profoundly. It is strongly suggested that the use and acceptance of rules to control and coordinate actions may be indigenous to certain professions. Possibly persons trained in some fields are conditioned to accept centralized controls more readily than others. We have seen that where professional goals are vague and general, as in the more academic disciplines such as science and English, rules are heavily relied upon to direct subordinates. Hall's study of a number of industrial organizations[28] illustrates this observation. He found significantly more rules in firms and departments with esoteric goals.

In the craft industries Arthur L. Stinchcombe[29] has shown that the self-enforcing quality of professional training is relied upon almost entirely where the decentralized nature of the work makes it difficult to supervise workers closely and where lines of communication are poorly drawn, making it difficult to impose rules. Other organizations, such as the business offices studied by Katz, Maccoby, and Morse,[30] rely almost entirely upon close supervision of workers, which in turn appreciably affects their performance.

Where units are dispersed, long-range controls may be devised in the form of impersonal constraints, as they are in the United States Forest Service.[31] By requiring frequent reports and a detailed diary showing exactly how each work day is spent, regional headquarters maintains control over rangers in an indirect way. Each ranger knows that his reports are reviewed and that he will be held accountable for his actions, and so he adheres closely to established procedures. Blau has also demonstrated the impersonal

28. Hall, "An Empirical Study of Bureaucratic Dimensions and Their Relation to Other Organizational Characteristics."

29. Stinchcombe, "Bureaucratic and Craft Administration of Production."

30. D. Katz, N. Maccoby, and N. C. Morse, *Productivity, Supervision and Morale in an Office Situation* (Ann Arbor: Survey Research Center, University of Michigan, 1950).

31. Kaufman, *The Forest Ranger.*

control exerted by performance records in a state employment agency.[32]

Moreover, rules may be called into play when personnel experience or commitment is low. Commitment may be thought of as a composite of organizational and professional loyalty. Total years of teaching experience, as well as length of service within a particular school, have been used here as an index of commitment, with experience reflecting professional commitment and length of service reflecting loyalty to a particular school. Both factors appear to be related to the degree of reliance on rules, although there appear to be significant differences among disciplines. The complex relationship of professional characteristics and organizational constraints is summarized in Figure 19.

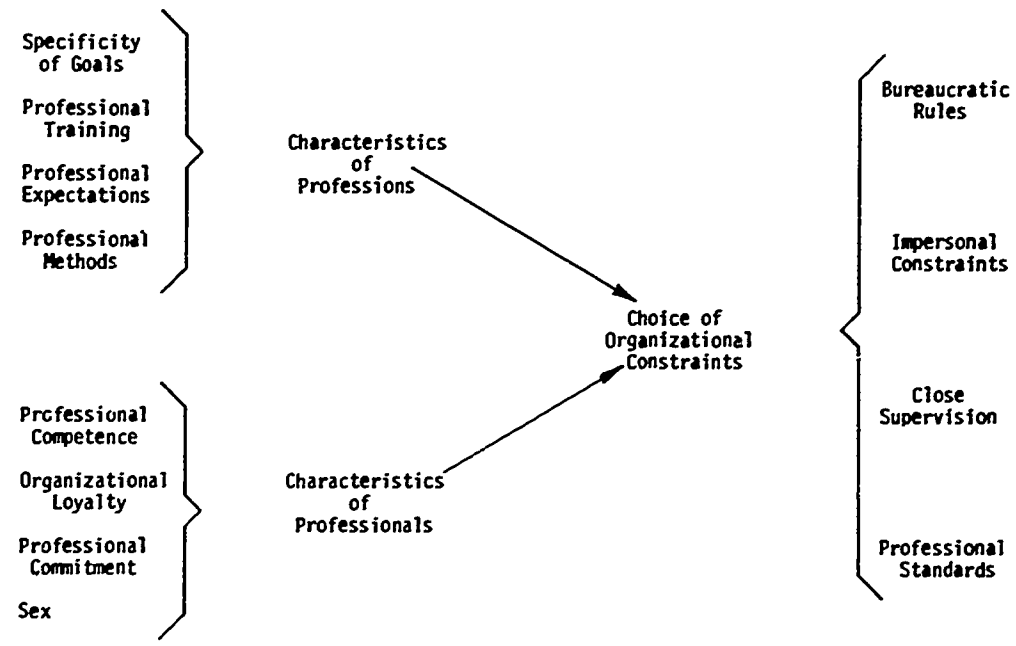


FIGURE 19. PROFESSIONS, PROFESSIONALS, AND PATTERNS OF CONTROL

32. Blau, *The Dynamics of Bureaucracy*, pp. 33-48.