To assess the effects of principal turnover on school organizational structures and effectiveness at elementary and secondary levels, the operations of schools that changed principals were compared to those that retained principals. Studies of organizational dynamics have identified important structural variables that can be applied to school settings, including such variables as organizational linkages that affect instruction (particularly those among school specialists, principals, and teachers). These studies have also revealed effectiveness indicators, including staff perception of effectiveness and job satisfaction and student attitudes toward school. A project conducted at 89 schools in a midwestern state—37 schools with new and 52 with continuing principals—sampled the opinions of teachers on organizational and instructional effectiveness by means of variously derived indexes that measured such institutional variables as intensity of work system interdependence, communication, school discipline, isolation, perceived organizational effectiveness, and indicators of job satisfaction; in addition, students responded to nine items describing their attitudes and the school climate. After the scored responses were averaged, no evidence was found either that principal succession has a significant effect on structural linkages or that succession increases or decreases organizational effectiveness. Further research should examine factors maintaining continuity in structures, possible time-lag effects of turnovers, and the pre- and postarrival phases of principal succession. (JW)
PRINCIPAL SUCCESSION AND CHANGES IN SCHOOL COUPLING AND EFFECTIVENESS

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In recent years a great deal of interest has been expressed about the effects that principals have on educational programs in their schools. While the literature on the school principal is voluminous, it tends to be prescriptive and ideological rather than descriptive and empirical (Morris, Crowson, Hurwitz, and Porter-Gehrie, 1981). A number of current writers speculate that principals play critical roles in determining the levels and quality of school processes and outcomes. Three sets of quotations are examples of recent assertions about principal effects.

It is clear that no single person is more key to school effectiveness than the principal and the deciding factor in determining effectiveness is the leadership he or she brings to the school. T.J. Sergiovanni, 1981, p.xvii.

The commission will help us to persuade our colleagues to pay more attention to what research tells us about how to enhance learning. T.H. Bell, 1981, p. 2

'Practices identified in research as effective by the National Institute of Education are: "Strong administrative leadership, especially by the principal..." Unidentified spokesperson for NIE at T.H. Bell's news conference.
The behavior of the designated school or program leader is crucial in determining school success. (D.L. Clark, L. S. Lotto, & M. M. McCarthy, p. 468)

Similar quotations have been made by Blumberg and Greenfield (1980), Edmonds (1979), and Lipham (1981).

While it seems reasonable to believe that principals can make a difference, Shoemaker and Frazer (1981:178) concluded from their review of the literature that none of the studies set out to study the role of principals, but that most concluded that principals were clearly important in determining the effectiveness of schools. In fact, some studies cited for principal effects (i.e., Wellisch, MacQueen, Carriere, and Duck) have focused
on the effect of compensatory educational programs or other interventions rather than on the effects of principals. Typically, the school effects studies report some kind of association—modest correlation coefficients or phenomenological impressions—that something about the principal causes student achievement, or other positive school outcomes.

Recent observational studies of principal behavior (i.e., Kmetz and Willower, 1982; Martin and Willower, 1981; Morris, V. C., Crowson, R. L., Hurwitz, E. & Porter-Gehrie, C.) cast some doubts on the effects of principals on curriculum and instruction in their schools. These studies indicate that the role of principals is characterized by variety, brevity, and fragmentation with little involvement in the instructional process. In other words, the behavior exhibited by principals does not provide obvious support for the conventional wisdom that principals effect student learning through strong instructional leadership.

Surprisingly few published studies directly test for principal effects. Moreover, Bossert, Dwyer, Rowan and Lee (1982), Rowan, Dwyer and Bossert (1982) and Rowan, Bossert and Dwyer (1982) observe that both the principal effects and effective schools research exhibit conceptual and methodological weaknesses. Rowan, Dwyer and Bossert (1982:2) suggest three standards to insure that information on principal effectiveness is useful to the academic research and school practitioner communities. These criteria are:

(a) Descriptions of principals' leadership behavior should refer to concrete, school-based activities that principal complete; (b) Measures of school effectiveness should be valid and reliable reflections of the diversity school goals; (c) Research concerning leadership effectiveness should be longitudinal and comparative.
Based on these three standards and commonly held assumptions about the amount of impact that principals can have on a school leads logically to the study of administrator succession. When principalships change incumbents, the opportunity exists to assess the naturally occurring effects of principals from a longitudinal perspective. Grusky (1961:262) maintained that succession qualifies as a generic organizational phenomenon and the consequences of the process vary from situation to situation. Conventional wisdom holds that changing principals will improve school performance. In contrast, Brown (1982:1) argues that because of its descriptive effects, succession will have a negative impact on organizational effectiveness, or that succession has no causal impact. Even if succession has limited effects, it provides a naturally occurring description that should result in larger variations in organizational components. Moreover, if there are conditional relationships, Brown (1982:15) posits that it may be possible to assess realistically the circumstances in which administrator change is likely to produce improved performance. Therefore, the first purpose of the current study was to assess the after-effects of principal succession on two sets of important organizational variables in schools—coupling and effectiveness. A second purpose is to review the literature and specify some of the major variables associated with the succession process.

**Theoretical Framework**

This section consists of seven parts. The literature on administrator succession will be presented first, followed by discussions of structural linkages, leader succession and structural linkages, organizational effectiveness, leader succession and organizational effectiveness, and
covariables. The last section will state the two hypotheses that guided the study.

**Leader Succession**

Administrative succession is the process by which key officials are replaced (Grusky, 1961, 261). Changes in leadership can represent a psychological impact of a new personal style, a new definition of the situation, a new communication network with the environment, or a jolt to the system which opens its members' minds (Child and Kieser, 1981). In other words, when members are recruited, particularly principals, teachers and other professional personnel, new bodies of knowledge, skills, and behaviors are imported which often serve as sources of new ideas in schools (Baty, Evan, & Rothemel, 1971, 430).

Early investigations of managerial succession focused primarily on the rate of succession, length of tenure, and associated organizational factors (Pfeffer and Leblebici, 1973). For example, Grusky (1961) and Kriesberg (1962) found succession in top executive positions was more frequent in large, bureaucratic organizations, but Gordon and Becker (1964) disputed their findings. More recent studies have tended to focus on succession and subsequent changes in organizational factors. A thread that runs through the history of the research, i.e., Grusky (1960:107), Birnbaum (1971:133) and Brown (1982:1), is that administrative succession leads to instability and conflict which, in turn, should influence organizational processes or linkages and performance.

**Structural Linkages**

Mintzberg's (1979) formulation provides a scheme to classify types of school units which can have informal interactions in organizations. He posits
that organizations are composed of five parts: strategic apex (i.e., superintendent), support staff (i.e., business affairs, public information), technostructure (i.e., specialists who serve the school by affecting the work of others), middle line (i.e., principals), and operating core (i.e., teachers). As professional bureaucracies, all five parts are present in school systems, but the technostructure, middle line, and operating core are most directly involved in instructional processes.

Although analysts in the technostructure are removed from the primary work flow, they may design, plan, and change instructional processes— or train people who do. These specialists are concerned with adaptation to meet environmental changes and standardization to reduce the need for direct supervision. In schools the professionals in the technostructure provide a variety of services, such as curriculum supervision and special education activities, that aid teachers to perform their tasks.

The middle line of schools has authority over the operating core and embodies the coordinating mechanism of direct supervision. Among the many tasks that middle-line administrators perform are the development of liaison contacts and communication of information within their schools. However, the most time-consuming roles involve negotiating and handling disturbances. For principals this includes working with teachers to resolve issues of student discipline.

The operating core of schools consists of teachers who perform the basic work of educating students. As professional bureaucracies, schools depend more upon standardizing instructional skills for coordination than direct supervision by the middle line. School districts assume that teacher training/
programs and state certification standards produce teachers with adequate teaching competencies. Once in classrooms, teachers make most of the instructional decisions, and little supervision is required.

Important indicators of informal structural linkages in schools include:

- for the operating core, work system interdependence among teachers and communication among teachers;
- for the operating core and middle-line administrators, communication between the principal and teachers and discipline procedures;
- and for the operating core and the technostructure, communication of teachers with LD specialists and work system interdependence of teachers and LD specialists.

Finally, teacher isolation, or the number of hours teachers spend in school working independently of other adults, indicates how much time the teachers are linked to students and performing the fundamental work of schools.

Leader Succession and Structural Linkages

After reviewing the literature, Gordon and Rosen (1981) concluded that evidence exists for the generalization that replacement of the leader has implications for group processes in organizations. Similarly, Meyer (1978) posited that the most reasonable, indeed obvious, hypothesis is that change in leadership is associated with change in organizational configurations and processes. Correspondingly, stability in leadership positions accompanies organizational stability. Meyer found small but consistent relationships between the stability of leadership and stability of organizational structures and processes. Additional support for the assertion that principal succession can impact structural linkages is provided by the reasoning of Hollander (1978:134-135). When a new principal enters the school, the group composition and social patterns will be changed. Empirical support for this reasoning was found by Guest (1962:54) and Grusky (1969:168). Moreover, the new principal
will bring new forms of organization, decision and planning processes and communication practices that will likely modify existing structural linkages. Consequently, support exists for the hypothesis that principal succession will have significant effects on the school structural coupling.

**Organizational Effectiveness**

A common assumption has developed among scholars that organizational effectiveness is a multidimensional concept (Steers, 1977; Campbell, 1977; & Scott, 1981). Virtually every phase, process, or outcome variable can be and has been used as an indicator of effectiveness. For the present study, three concepts were used as indicators of organizational effectiveness of schools: perceived organizational effectiveness, teacher job satisfaction, and student attitudes toward school.

Perceived organizational effectiveness is the subjective evaluation of a school's productivity, adaptability, and flexibility. Schools produce a variety of products and services in terms of instruction, learning, and extracurricular events. The relative quality, quantity, and efficiency of production are components of organizational effectiveness. Mott (1977) conceptualizes adaptability or the ability to change routines into two types. Symbolic adaptation involves anticipating problems, developing timely solutions, and staying abreast of new educational processes and equipment. Behavioral adaptation is the prompt implementation of solutions and the utilization of new processes and equipment. Flexibility, as a special type of adaptive behavior, is the ability to adjust quickly and to cope with temporarily unpredictable overloads of work. Effective schools are perceived to produce products and services in greater quantity and better quality, to show more flexibility, and to exhibit higher adaptability than less effective organizations.
Job satisfaction is "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's values" (Locke, 1969). Moreover, job satisfaction has changed from being a precursor of performance to a legitimate criterion of organizational effectiveness. Holdaway (1978) concludes that job satisfaction is generally viewed as an organizational outcome, not as a determinant. Smith, Kendall, and Hulin (1969) believe that improving job satisfaction is a humanitarian value and is a legitimate goal in itself. In this investigation, job satisfaction serves as a dependent variable and is defined as the overall affective orientation teachers have toward their work in schools.

Student attitudes that describe the learning environment represent an important indicator of school effectiveness. The concept of student attitudes and perceptions of schools is one of the more ambiguous concepts in education. Studies of student attitudes exhibit wide ranges of definitions: from alienation to identification with school, from drop-out to high attendance behavior, and from competition to individualism. In the current study, the definition developed by Likert (1972) was used. Student attitudes are their understanding of the behavior of teachers and administrators toward them, of certain relationships in schools, and of the students' actual motivations and feelings about the school.

Taken together, the three dependent variables form a perceptual, multi-dimensional index of school effectiveness from the perspectives of teachers and students. The three concepts are consonant with a systems resource framework as described by Stewart (1976) and Pennings and Goodman (1977). That is, effectiveness is the degree to which an organization, such as a school, can preserve the integration among its parts by producing outcomes in exchange for resources and continued survival.
Leader Succession and Organizational Effectiveness

Brown (1982:1-4) concludes that the literature contains three basic hypotheses and explanations for administrator succession and organizational performance. The first is that succession should have a positive effect on effectiveness. Based on the widely held belief or common sense in our society about the ability of individuals to control organizational outcomes, Brown reasons that attributions of leader causation (Pfeffer, 1977) of organizational events are supportive of the idea that administrative change will be a positive effect on performance.

The second prediction is that succession creates so much instability that organizational effectiveness suffers (Brown, 1954). Gouldner’s (1954) study and subsequent observations about the managerial succession in a mining and manufacturing firm form the basis of this position. He noted that an increase in tensions and declines in morale and productivity accompanied the new manager. Grusky (1960) added credence to the position that succession diminishes performance with a review of early case studies of the process. However, Guest (1962) observed a succession that not only did not create instability, but significantly improved the unit’s productivity. Brown (1982:2) concludes that "the original motivation for the hypothesized links between succession, instability, and decreased effectiveness seems empirically thin and theoretically conservative in its attitude toward change."

The third hypothesis, advanced originally by Gamson and Scotch (1964), is that succession plays no causal role in organizational effectiveness. They argued that success is a function of organizational processes such as recruiting able personnel and acquiring resources that are beyond the control of first level managers. Consequently, any relationship between succession and performance is spurious. Gamson and Scotch proposed that succession should be
seen as a scapegoating ritual performed during transitory performance slides. A shortcoming of this position is that it is based on managerial changes in athletic teams and may not be generalizable to other organizations such as schools.

Brown (1982:3) concludes that the available data do not clearly support any of the competing theories. His own findings (1982:13-15) support the ritual scapegoating position advanced by Gamson and Scotch. Yet, Brown believes that evidence from comparative studies is most consistent that succession leads to a decrease in organizational effectiveness. After reviewing the literature, Gordon and Rosen (1981:158) conclude that chief executive succession in corporations will have differential effects on performance criteria, and the results will be moderated by a variety of organizational and environmental variables. Lieberson and O'Connor (1972) strongly support Gordon and Rosen. Based on these conclusions that instability created by administrator succession leads to differential performance, support exists for the hypothesis that principal succession will have significant effects on perceived organizational effectiveness, teacher job satisfaction, and student attitudes.

Covariates

Six covariates were included in the study. Each of the variables has been related to one or more of the linkage or organizational effectiveness indicators in previous research efforts. In a number of investigations, sex of the teaching staff, levels of experience and education of teachers, and level of school assignment have been correlated with job satisfaction or perceived effectiveness (Holdaway, 1978; Miskel, Fevurly & Stewart, 1979). Scott (1981:235) observes that the meaning of size is far from clear, but its importance as a determinant of structural characteristics is well established. In addition, evidence exists for effects of leadership style on changes made
by the successor (Carlson, 1962; Helmich & Brown, 1972; Hoy & Aho, 1973; Ganz and Hoy, 1977). Since these factors could directly or indirectly affect the criterion variables, their relative effects were assessed.

**Hypotheses**

Combining the independent, dependent, and covariate variables produced the following two hypotheses that guided the study.

**Hypothesis One.** Principal succession will have significant main effects on the seven structural linkage factors when leadership style and demographic factors are controlled statistically.

**Hypothesis Two.** Principal succession will have significant main effects on the three organizational effectiveness criteria when leadership and demographic factors are controlled statistically.

**METHODOLOGY**

**Sampling and Data Collection Procedures**

Using the school and principal as the unit of analysis, two criteria were used in selecting the sample. First, the experimental group was to be comprised of schools with new principals for the fall 1980 school year. This group was identified from the records of a state administrator’s association. Second, the control group was to be comprised of schools with similar size, geographic location, and socio-economic characteristics to the experimental group, but with continuing principals. Employing available demographic statistics and expert opinions from central office administrators in the school districts, 92 schools were identified, and 89 (97%) agreed to participate in the study. The experimental group of 37 schools included 13 elementary, 15 junior high, and 17 high schools. The control group of 52 schools with principals continuing in the position was comprised of 20
elementary, 15 junior high, and 17 high schools. While the procedures did not ensure a random sample, urban, suburban, and rural schools from wide geographic areas of a mid-western state were included.

Most of the data were collected from teachers and students. As part of a larger study, three groups of teachers for each school were chosen from faculty rosters using a table of random numbers. When the school was large enough, eight teachers were chosen for each group or 24 total. If a school had less than 24 teachers, the number for each group was reduced proportionately. A total of 1,988 teachers were included in the sample. Using an original and two follow-up mailings, 1,697 (85%) teachers returned the measures in the fall of 1980. In the spring of 1981, the 1,697 that had participated in the fall were sent the same measure as the one they had completed earlier. A total of 41 teachers were no longer in the schools. Of the 1,658 that remained, 1,442 (87%) returned the instruments. The overall participation level was 73% of the initial sample.

Ten students from each school or 890 were asked to complete an attitude measure. Using a standard set of instructions describing how to draw appropriate samples, personnel within each school selected the students. In secondary schools, language arts teachers made the selections from required English classes. In elementary schools, a fifth grade teacher selected the students. The teachers were asked to use a systematic selection procedure by dividing the number of students in class by 10 and distributing the measure to students based on a resultant answer, for example, every third student in a class of 30. A total of 890 (100%) students participated in each round.

To reduce the probability of a response set across different perceptual instruments, the first group of teachers responded to six of the seven measures of structural linkages; the second group to a set of scales not
reported in this study; and the third group responded to an indicator of structural linkages (work system interdependence of teachers with learning disabilities specialists) and the criterion variables of job satisfaction, and perceived organizational effectiveness. Demographic data for education, experience, and gender were provided by each teacher respondent. Level and size of school were taken from existing records.

Since the school and principal was the unit of analysis, data were aggregated by averaging the teacher and student responses within each school. This produced scores for 17 variables for each school: structural linkages, effectiveness, and 7 covariates.

The data were collected through mail survey procedures. In most cases employees within the districts coordinated data collection efforts. They used the district mail system for sending and returning the measures to the research assistant in the district. In a few instances the federal mail system was used, and the measures were returned directly to the principal investigator.

Instrumentation for the Independent Variables

The independent variable was whether the principal was new to the building or not. The principals were divided into two groups based on tenure in the school—new and continuing. The principals in the new group were not necessarily new to the principalship.

Structural linkages. Seven short instruments were used to measure structural linkages. The first for linkages within the operating core is called the intensity of work system interdependence among teachers scale. Developed by Bridges and Hallinan (1978:28-30), intensity of work system interdependence is defined as the sum of scores for 13 different activities of the staffing pattern inventory. The items deal with interdependencies among teachers in
the instructional process. The measure lists 13 activities, such as lesson preparation and use of instructional materials, and asks how frequently teachers jointly work together on these items. The response categories ranged from 0 to 5+ and were scored 0 to 5. The frequencies were summed to produce a possible range of 0-65, with a higher score indicating greater interdependence. The developers reported an alpha coefficient as an estimate of reliability of .95 and presented positive indicators of validity. Miskel, Bloom, and McDonald (1982) found an alpha coefficient of .91 and a test-retest coefficient after four weeks of .74. Alpha coefficients for the current samples were .92 and .90. In addition, evidence was strong for construct, convergent, and predictive validity.

Ten items from the intensity of work system interdependence among teachers scale were adapted to form a measure called the intensity of work system interdependence between teachers and LD specialists scale. The new measure was designed to assess linkages between the operating core and the technostructure. The directions for the original measure were rewritten as follows: "How often on the average do you jointly engage in each of the following activities with a learning disabilities specialist?" Example items were: select instructional materials and select topics to be taught. The 10 activities were listed, and the teachers responded by writing a number from 0 to 5+ times per month. The responses were added to produce a score that could range from a low of 0 to a high of 50. The alpha coefficient was .93 for both data sets. The validity of the measure for cooperative or joint planning between the operating core and technostructure was supported by the strong indicators of validity for the original instrument.

Linkages were also measured by three versions of a communication measure refined by Bridges and Hallinan (1978:30). For each of seven topics (five
task-relevant and two task-irrelevant), teachers checked the frequency with which they talk with other teachers: daily, several days a week, once a week, once or twice a month, once or twice a semester, and never. The weights assigned to these six frequency categories approximate the absolute magnitude of differences among the categories: daily (5.0), several days a week (2.5), once a week (1.0), once or twice a month (.5), once or twice a semester (.25), and never (0). The communication score is determined by summing the weights of the seven items. The theoretical range of scores was 0 (low) to 35 (high communication frequency). An alpha coefficient of .88 was reported by Bridges and Hallinan (1978:30). In addition to the original scale, two other measures were formed by rewriting the directions to ask for the frequency with which teachers talk with the principal and with a learning disabilities specialist. Therefore, three measures of linkages through communication were (a) teachers with teachers, (b) teachers with principal(s) and (c) regular classroom teachers with learning disabilities specialists. The measures assessed the linkages within the operating core, between the operating core and the middle line, and between the operating core and the technostructure, respectively. In a pilot study the estimates of reliability for the first two measures (alpha coefficients) were .79 and .87; respectively. The test-retest coefficients after four weeks were .73 and .55. In the present samples, the alphas ranged from .80 to .83. Moreover, the findings indicated construct, concurrent, and predictive validity for the two measures (Miskel, Bloom & McDonald, 1982). The communication measure for learning disabilities specialists had alpha coefficients for the current samples of .91 and .97.

The sixth linkage measure, discipline procedures, asked the teachers to describe the student control processes used in the school. Six items determined the level of linkage between the teachers in the operating core and the
principal in the middle line for managing student behavior. An example item was: Teachers consult with the principal or assistant principal(s) about student discipline and control. Five extent categories (always, frequently, often, occasionally, never) were used for each item and were scaled from 4 to 0 with a possible range of scores from 0 (low linkages) to 24 (high linkages). The alpha coefficients were .86 for the first set of responses and .87 for the second.

The final structural linkage measure was a single item for teacher isolation: "Of the total hours that you spend in school each week, how many hours do you work in isolation of other teachers?" In contrast to the other more specific measures of structural linkages, this one indicates a general linkage of the operating core to the students. In other words, higher isolation scores mean that teachers have more opportunities to work directly with students and to plan instructional activities than lower isolation scores.

Perceived organizational effectiveness. Mott's (1972:21-24) Index of Organizational Effectiveness (IOE), as adapted by Miskel and his colleagues (1979 & 1982), was employed to measure this concept. To develop the measure, Mott integrated the following components: quantity and quality of their products, efficiency, adaptability, and flexibility. The IOE is normative (it attempts to specify things an organization must do to be effective) and is generalizable to all organizations.

The original eight items were modified by replacing those words pertaining to other types of organizations with words indicating an educational setting. For instance, "school" was substituted for "division." Example items include: "Of the various things produced by the people you know in your school, how much are they producing?" "Do the people in your school get maximum output from the available resources (money, people, equipment, etc.)?"
"People in this school do a good job anticipating problems." "What proportion of the people in your school readily accept and adjust to the changes?" Each item had a five-category extent scale that was scored from 1 to 5. The possible range of scores was 8 (low effectiveness) to 40 (high effectiveness).

Miskel and his colleagues (1979 & 1982) have found consistently high alpha coefficients as indicators of internal consistency of around .90 and a test-retest reliability estimate after four weeks of .48. The alpha coefficients in the current samples were .86 and .90 for the first and second data collections respectively. Mott (1972) provided extensive indicators of validity and reliability.

Job satisfaction. A seven-item measure was used to operationalize this concept. The scale indirectly probed various indicators of job satisfaction. Example items were: "I often think of changing jobs." "Most other educators are more satisfied with their jobs than I am." The teachers responded using a set of five categories from strongly disagree to strongly agree. The categories were assigned values of 1 to 5, and the possible range was from 7 (dissatisfied) to 35 (satisfied). The alpha coefficient was .82 and the test-retest coefficient after four weeks was .81 (Miskel, Bloom & McDoanld, 1982). For the current samples, the alphas equaled .80 and .86, respectively. The measure has high face validity.

Student attitudes. The perceptions of the school by students were assessed with a measure composed of nine descriptive items. Example items were: "Teachers in this school are friendly." "Learning is enjoyable." The students responded using a set of five categories from strongly disagree to strongly agree. The categories were assigned values of 1 to 5, and the potential range was from 9 (negative) to 45 (positive). The alpha coefficients were .77 for the responses in round one and .79 in round two.
Covariates. Educational level of the teachers was scaled 1, 2 or 3 for a bachelor's, master's, or doctoral degree, respectively. The experience levels of the teachers was measured by the number of years the teacher had worked in the present position. Sex or the female-male composition of staff was determined by scaling female as a 1 and male as a 2. The level of the school was scaled 1 to 4 for elementary, middle, junior high, and senior high, respectively. Size of the school was defined as the number of students enrolled in the school.

The leadership behavior description questionnaire (LBDQ) as presented by Halpin (1966) served as the basis of the leadership style measure. The LBDQ contains two subscales—initiating structure and consideration. Initiating structure includes any leader behavior that delineates the relationship between the leader and subordinates and, at the same time, establishes defined patterns of organization, channels of communication, and methods of procedure. Consideration includes leader behavior that indicates friendship, trust, warmth, interest, and respect in the relationship between the leader and members of the work group. The LBDQ items ask the respondents to describe the behavior of the leader on a five-point scale from always to never. The scoring is from four to zero.

For this study, five consideration and five initiating structure items were used. The items were selected using two criteria. The first was a high relationship to the core concept. Meeting this criterion was assessed by using an item analysis of the LBDQ items from an earlier study of principals (Miskel, 1974). Items correlating with the appropriate scale at .60 or greater were considered to be highly related to either consideration or initiating structure. The two investigators then selected five items for each scale that they judged provided the most diverse set of items. An example
item for consideration was: She/he treats all group members as equals. A sample item for initiating structure was: She/he sees to it that the work of group members is coordinated. The potential range of scores for each scale was 0 (low) to 20 (high). For the first and second response sets the alpha coefficients were .75 and .81 for consideration and .87 and .90 for initiating structure, respectively. Extensive indicators of validity for the LBDQ have been provided by Stogdill (1973).

RESULTS

In studies of succession effects, Allen, Panian, and Lotz (1979:176) observed that a major methodological problem involves the familiar and paradoxical regression effect which is common to many longitudinal studies. These researchers concluded that the most satisfactory resolution of the problem involves a statistical covariance adjustment.

The two hypotheses were evaluated using an analysis of covariance procedure. The grouping factor was tenure of the principal in the school — new and continuing. To test for changes in the dependent variables, the parallel pretest score was covaried for each analysis. To control for leadership effects and for lower-order interaction effects with demographic factors, consideration and initiating structure and the five variables of teacher education, experience, school level, and size were used as covariates.

Summaries are presented in Table 1 of the data analyses for the two hypotheses. No support for the hypotheses was found. Of the ten analyses, none exhibited significant effects. Only the t values of 3.71 (p=.06) for communication of teachers with learning disabilities specialists approached the .05 level of significance. In fact, 5 of 10 t values were smaller than 0.10 and only three were larger than 1.00.
DISCUSSION

Findings

The lack of evidence for the hypotheses in this study supports the no effects postulate formulated by Gamson and Scotch (1964). A plausible explanation for this interpretation is provided by Katz and Kahn (1978:187). They observe that a primary strength of formal organization is its constancy under conditions of persistent turnover of personnel. They argue that the units of organizations must be linked psychologically. Because organizations consist of patterned and motivated acts of people, organizations will continue to exist only so long as the attitudes, beliefs, perceptions, habits, and expectations of individuals evoke the required motivation and behavior. Katz and Kahn conclude that organizations remain intact only as long as the psychological linkages hold, and, yet the intactness and longevity of organizations such as schools is independent of the life-span of any and all organizational members. Based on the ideas of Katz and Kahn, principal succession fails to make an impact because the strong structural and cultural linkages insure a social and psychological continuity. Similarly, Grusky (1960:115) believed that highly bureaucratic organizations are able to decrease the disruptive effects of succession by standardizing the succession process itself.

As suggested by Lieberson and O'Connor (1972:129) another interpretation of the findings is that principal succession exhibits a time-lagged effect.
Since the time between the assessments of the dependent variables was only 6-7 months, it might be argued that not enough time had elapsed for the changes to become apparent to the teachers and students. In the current study, however, most of the variables appear to have a temporal quality, i.e., frequency of communication and planning, and should show immediate effects.

A third interpretation is that the research study did not include the most powerful factors in principal succession. In fact, the only succession factor included was whether the principal was new or continuing. As Charters and Jones (1973) have suggested, the study may have assessed as non-event. In future studies other factors should be included.

Factors for Succession Research

Gordon and Rosen (1981:240-253) propose a succession model to guide research that is based on prearrival and postarrival factors. An elaborated and modified version of their work is presented in Table 2. The factors are divided for analytic purposes into a set of events that occur before the arrival and entrance of the successor principal into the school, and a second set of events that occur once the new principal has taken office and begins to act. For practical purposes these factors are highly interactive and interdependent. A third set of factors are listed in Table 2 as indicators of succession effects and essentially are changes in the prearrival and arrival factors. Although not discussed in this paper, each factor and subfactor given in Table 2 has a considerable body of literature surrounding it. Citations are given in Table 3, however, for each set of factors that detail the relationships for possible succession effects.
To a large extent, the performance of a school depends on the individual efforts of leaders and principals. Nonetheless, principals are able to influence performance in a number of ways. However, many of the options open to chief administrative officers of an organization are not open to principals. One only has to compare the mandates given to insider and outsider superintendents (Carlson, 1961) with the mandates of principals (Ganz and Hoy, 1977; Hoy and Aho, 1973) to understand the limitations placed upon new principals. Moreover, the paradox maybe that succession is precipitated by inadequate performance, but a change in principals may have only a marginal impact on subsequent performance.

Research Methods

A variety of empirical approaches to principal succession appear to be appropriate, but three longitudinally based methods particularly recommended. Qualitative case studies in a number of diverse settings have provided excellent insights about the succession process and organizational leadership. Excellent examples include Gouldner (1954), Guest (1962) and Gephart (1978). The advantages of the case analysis approach include an examination of microsociological processes that include naturally occurring communication events, a movement beyond formal conceptions of organization to the consideration of informal phenomena which reflects the members' meanings and sense-making practices, and, finally, alternative theories of organizational succession could be developed by inductive construction of grounded theory (Gephart, 1978:555).

A second approach that exhibits promise in describing and explaining succession effects is actuarial studies, that is, statistical examinations of existing data on managerial turnover and performance. Perhaps the best known actuarial studies have been made with athletic terms--baseball by
Grusky (1963) and Allen, Panian and Lotz (1979), and basketball by Eitzen and Yetman (1972). However, Lieberson and O'Connor (1972) used data from Moody's Industrial Manual and Moody's Transportation Manual, and Salancik and Pfeffer (1977) used expenditure patterns for 30 cities during the years 1951-1968 to examine the influence of changes in leadership on performance. Both studies suggest that the succession impact accounts for very little variance in the performance indicators. In the educational setting good data bases have been maintained by state departments of education and school districts which could be used for actuarial studies. Two recent examples using data from California are by Rowan (1982) and Ogawa and Hart (1983). While the actuarial approach suffers from the lack of ability to account for the participants' intentions and perceptions when the change is made, Gordon and Rosen (1981:232) believe that this type of research allows investigators to address two important questions. What are the characteristics of the leader—alone and in the context of a group—which bear on effectiveness? What is the nature and impact of structural, higher-level decisions and processes which set the limits for leader's actions and influence attempts? Moreover, interaction effects, deemed of exceptional importance in studies of principal by Rowan and his colleagues (1982), can be assessed.

The third approach that shows exceptional promise and is represented by the current study is naturally occurring field experiments. Additional examples of this approach are Jackson (1953), Lieberman (1956), and Rosen (1970). In contrast to the actuarial studies, these three studies revealed substantial impacts of the leader succession on the criterion variables. As observed by Lieberman (1956:386), field experiments that use longitudinal data tend to take advantage of natural changes among personnel in the organization to examine a number of factors both before and after the modifications occur.
Conclusion

We agree with Gordon and Rosen (1981:252) that leadership succession research should be substituted for more traditional studies of leadership. For example, cross-sectional studies of groups and principals during periods of relative equilibrium do not reveal the full range of variation and complexity in schools and leadership. Gordon and Rosen believe strongly that the truly critical phenomena occur before the leader comes on the scene and immediately after arrival. They maintain that it is during the pre- and post-arrival phases that old resource allocation decisions are argued again, that suppressed ideological divisions over goals and performance are raised for reevaluation, and that job responsibilities are redefined. It seems reasonable to expect that principal effectiveness will be more visible during this relatively unstable period. Moreover, focusing leadership studies during periods of change allows situational and personal variables to be considered simultaneously from a longitudinal perspective. Finally, a quotation from Grusky (1960:115) shows the importance of succession to the field of educational administration, "The universality of succession in formal organizations and the tendency of the process to promote instability combine to make this phenomenon of importance to organization theory."


Edmonds, R. Some schools work and more can. Social Policy, 1979, March-April, 28-32.


Freeman, J. Going to the well: school district intensity and environmental constraint. Administrative Science Quarterly, 1979, 24(1), 119-133.


Sergiovanni, T. J. Is leadership the next great training robbery? Educational Leadership, 1979, 36, 388-394.


TABLE 1

Means, Standard Deviations (SD), and Analysis of Covariance Summaries for the Effects of Principal Tenure on Ten Dependent Variables

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Table 2
Factors to Consider when Designing Studies of Principal Succession

### PREARRIVAL FACTORS

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### ARRIVAL FACTORS

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### INDICATORS OF SUCCESSION EFFECTS

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Culture
- Brookover and others, 1978
- Hellriegel and Slocum, 1974
- Jackson, 1953

Communication
- Baty, Evan and Rothermel, 1971
- Cusick, 1981
- Gordon and Rosen, 1981
- Guest, 1962

Organization
- Freeman, 1979
- Gordon and Rosen, 1981
- Gouldner, 1954
- Grusky, 1960
- Helmic, 1977
- Lieberson and O'Connor, 1972
- Meyer, 1978
- Perruci and Mannweiler, 1958

Program
- Bossert, Dwyer, Rowan and Lee, 1982
- Pfeffer, 1982

Successor's Actions
- Gordon and Rosen, 1981
- Schneider, 1983

Community Environment
- Lieberson and O'Connor, 1972
- Meyer, 1978
- Pfeffer and Leblebici, 1972

Additional Factors
- Hoy and Miskel, 1982