Some Characteristics Associated with the Effectiveness of Elementary Principals as Demonstrated by Role Perceptions and Utilization of Time

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Elementary principals have a major role in the educational system. However, research addressing their priorities, activities, and performance is limited. Studies indicate a relationship between principal performance and school effectiveness and achievement of students. This investigation identified factors which may be associated with principal effectiveness: length of time in the principalship, gender, level of self-confidence, and leader style. It proposed that there is a relationship between principals' priorities and activities. It predicted that there are differences in the priorities and degree of participation in activities between new and experienced principals, male and female principals, self-confident and less self-confident principals, and principals with an effective leader style and those with less effective leader styles. It further proposed that the relationship between priorities and activities is different within designated pairs of subgroups. Finally, it predicted that there is a relationship between priorities of the principals and perceptions expressed by superintendents and teachers. A stratified random sampling of 20 elementary principals in Berrien County, Michigan, comprised four equal subgroups: new male, experienced male, new female, and experienced female. Subjects were
interviewed, and four instruments were administered. A ranking of 10 areas—five associated with effectiveness—identified principals' perceptions of role priorities. A log of participation, based upon these same areas, determined how time was utilized for 2 days. The Adjective Check List determined principals' levels of self-confidence, and the Styles of Management Inventory identified their leader styles. Each principal's superintendent and teachers also completed the ranking, indicating perceptions of the principal's activities. Analysis of the findings did not show support for the hypotheses. Speculation regarding factors affecting the outcome include sample size and homogeneity, accuracy of responses, and number of years of experience used in structuring subgroups. Although length of service, gender, level of self-confidence, and leader style did not appear to affect role perception or utilization of time, principals indicated awareness of areas of responsibility associated with effectiveness. Additional studies could further clarify the role of the elementary principal and factors associated with principal effectiveness. The theory of effectiveness was introduced as a framework for these investigations.
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SOME CHARACTERISTICS ASSOCIATED WITH THE EFFECTIVENESS OF ELEMENTARY PRINCIPALS AS DEMONSTRATED BY ROLE PERCEPTIONS AND UTILIZATION OF TIME
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Judith Jean Johansen
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Background of the Problem

The importance of the role of the elementary principal in our educational system is currently receiving considerable attention. There is a growing body of thought which suggests that principals can and do have a major impact upon the effectiveness of their schools and, thus, upon the lives of children and youth. Lipham (1981) wrote:

While schools make a difference in what students learn, principals make a difference in schools. This is recognized by scholars, researchers, journalists, practitioners, parents, citizens, and even politicians. They have all found that the local school is the key to educational improvement and that the leadership of the principal is crucial to the school's success with students. The principal as head of the school, which is a social system, has great potential to refine or renew its educational program. (p. 1)

Although the importance of the role of the elementary principal has become quite firmly established, it appears that this role is not yet clearly and consistently defined. Howell (1981, pp. 333–334) reported that his study shows that upper-level administrators view the principal as an instructional leader, an innovator, one who inspires, a supervisor, and a delegater. The same study revealed that, in reality, principals spend the majority of their time on office responsibilities and paper work. Furthermore, personal survival and crisis management tend to replace instructional leadership.
Manasse (1982) explained:

Despite hundreds of articles, studies, and textbooks on educational administration, until recently almost no research has even described what principals do during a typical workday. Nor have local school districts been any more articulate in defining what they expect principals to do. (p. 10)

It becomes evident that research relating to elementary principals and to the factors which may be associated with their performance is quite limited. Furthermore, the theme of "effectiveness" is rather new to education, having gained attention at the end of the last decade and the beginning of the current decade. There have been some studies which indicate how principals spend their time. These studies have not associated the activities of the principal and utilization of time, with school effectiveness or with the effectiveness of the principal. In addition, no empirical research has been found which compares the activities and utilization of time between new principals and experienced principals. In fact, no studies directly regarding new principals have been located. Furthermore, studies appear to be scarce which relate principal effectiveness and utilization of time with other factors which may be associated with performance, such as gender, self-confidence, and leader style. Then, too, research comparing the perceptions of principals with the perceptions of teachers and supervisors as regarding the principal's activities is somewhat rare.
Statement of the Problem

The general question addressed in this study is: To what extent do elementary principals espouse and practice those activities which appear to be related to principal effectiveness? The specific question then becomes: Are the priorities and activities of elementary principals—including those based on principal effectiveness—related to factors such as length of time in that position, gender, self-confidence, and leader style?

The purpose of this study encompassed three major concerns. The first was to compare some characteristics of elementary principals with their perceptions of the importance of various job activities, including those based on principal effectiveness. The characteristics under consideration were length of time in the principal-ship, gender, self-confidence, and leader style. These characteristics were also addressed in the second major area, the comparison of characteristics of principals with their degree of participation in various job activities, including those based on principal effectiveness. The third concern was to assess the relationship between the job activities elementary principals believe they should do and the way they actually spend their time and then to examine this relationship in connection with the characteristics of principals which have been indicated. Finally, the study compared the perceptions of elementary principals with the perceptions of their supervisors and their teachers regarding the priority of various job
activities associated with the principalship, including those activities based on principal effectiveness.

Research Questions

The research questions addressed in this study ask:

1. Is there a difference between new principals and experienced principals in the ranking of their perceived importance of various job activities, including those based on principal effectiveness?

2. Is there a difference between male principals and female principals in the ranking of their perceived importance of various job activities, including those based on principal effectiveness?

3. Is there a difference between self-confident principals and less self-confident principals in the ranking of their perceived importance of various job activities, including those based on principal effectiveness?

4. Is there a difference between principals with an effective leader style and principals with less effective leader styles in the ranking of their perceived importance of various job activities, including those based on principal effectiveness?

5. Is there a difference between new principals and experienced principals in the log of their participation in various job activities, including those based on principal effectiveness?

6. Is there a difference between male principals and female principals in the log of their participation in various job activities, including those based on principal effectiveness?
7. Is there a difference between self-confident principals and less self-confident principals in the log of their participation in various job activities, including those based on principal effectiveness?

8. Is there a difference between principals with an effective leader style and principals with less effective leader styles in the log of their participation in various job activities, including those based on principal effectiveness?

9. Is there a relationship between how principals perceive that they should spend their time—as indicated on the ranking—and how they actually do spend their time—as indicated on the log?

10. Is there a relationship between how new principals perceive that they should spend their time—as indicated on the ranking—and how they actually do spend their time—as indicated on the log? Is this relationship different for experienced principals?

11. Is there a relationship between how male principals perceive that they should spend their time—as indicated on the ranking—and how they actually do spend their time—as indicated on the log? Is this relationship different for female principals?

12. Is there a relationship between how self-confident principals perceive that they should spend their time—as indicated on the ranking—and how they actually do spend their time—as indicated on the log? Is this relationship different for less self-confident principals?

13. Is there a relationship between how principals with an effective leader style perceive that they should spend their time—
as indicated on the ranking—and how they actually do spend their
time—as indicated on the log? Is this relationship different for
principals with less effective leader styles?

14. Is there a relationship between the perceptions of elementary
principals and the perceptions of their supervisors regarding
the priority of various job activities associated with the principal-
ship, including those activities based on principal effective-
ness?

15. Is there a relationship between the perceptions of elementary
principals and the perceptions of their teachers regarding the
priority of various job activities associated with the principal-
ship, including those activities based on principal effectiveness?

Theoretical Bases of the Study

The study of administration has its roots in the social sci-
ences, primarily the behavioral sciences, and organizational theory.
It appears that Chester Barnard in 1937 was the first person to re-
late administration to the behavioral sciences (Campbell, Corbally,
& Ramseyer, 1966, p. 73). Campbell et al. (1966) explained:

One of Barnard’s major contributions was the concept of
effectiveness and efficiency. Effectiveness is system-
oriented and has to do with the achievement of the orga-
nization goals. Efficiency, on the other hand, is
person-oriented and has to do with feelings of satisfac-
tion a worker derives from membership in an organization.
(p. 74)

Organizational and personal dimensions of social behavior were
later defined and illustrated by Getzels and Guba. This model,
adapted by Boles (1980, p. 30), indicates that the behavior of the
individual is a product of factors within him or her and factors related to the institution, or social system (see Figure 1). The ultimate goal in this research project was to contribute to the understanding of social behavior. Individuals who occupy the role of elementary principal were studied in an attempt to identify and understand behavior related to that role within the educational system.

The theory of social behavior underlying this study was applied in a normative manner since it was hoped that, by gaining a better understanding of some factors regarding behavior, positive and constructive changes in that behavior could be initiated. Specifically, in this study it was hoped that by understanding the perceptions and participation of elementary principals regarding various job activities, useful strategies could then be developed to enhance the performance of individuals who occupy this role as well as the effectiveness of the institutions in which they serve.

Limitations

The major limitation of this study is the fact that the log of daily activities which the subjects completed was recorded toward the close of the school year. Such timing may give rise to speculation that the responses as to how principals spend their time may not be typical. However, as one participant indicated: "Does any principal ever have a 'typical' day?" Another limitation may be the division of subgroups based upon 5 years of job experience.

**Figure 1**

Dimensions and Characteristics of the Behavior of an Individual in a Social System
Significance of the Study

There is some information in the literature which addresses the role and functions of the elementary principalship and how principals utilize their time, and there are also recent reports treating principal effectiveness. However, no empirical data could be found which investigated the relationship between how the principal spends his/her time and the emphasis on various aspects of effectiveness. This depiction study could be important in increasing, clarifying, and synthesizing an understanding of these key educational leaders and their performance. Further, this study can serve as a foundation to future investigations. Based on findings, improvements may be incorporated in the training of individuals who are aspiring to the principalship and those who already are serving in this position. Principals may, thereby, find new ways of viewing their role, activities, and use of time—ways which may ultimately lead to more effective schools to serve our nation's young people. What higher calling could any research address?

Summary

This section which presents the problem and its background has delineated the importance of the role of the principal in our educational system and the need for further study focusing upon the role. School effectiveness and principal effectiveness are topics which have gained much attention in educational literature. This study presents a view of the role of the elementary principal—
specifically as relates to job priorities and activities—in light of what has been written concerning principal effectiveness.

Overview

In succeeding sections the problem is explored, and the research questions which have been presented are addressed. First, literature related to the problem is discussed, followed by the rationale. From this are derived the research hypotheses. Next, the method for testing the hypotheses is considered. The subjects and sampling plan, design of the study, and the instruments employed are discussed. The section on data analysis provides a review of the results and the interpretation. The study is then summarized, and conclusions are stated. Finally, the many factors associated with effectiveness are synthesized and developed into the framework for a new theory—the theory of effectiveness.
CHAPTER II

REVIEW OF THE LITERATURE

Organization

The literature review is organized according to the following subheadings: (a) elementary principals, (b) new principals, (c) women principals, (d) self-confidence and the principalship, (e) leader style and the principalship, (f) teachers' perceptions of the principalship, (g) supervisors' perceptions of the principalship, (h) the role and activities of principals, (i) effective schools, and (j) effective principals.

Elementary Principals

Literature focusing upon studies of principals and their position and activities is quite limited. What appears in the literature tends to be "how to" accounts, anecdotes, and inspirational messages; however, research juxtaposing elementary principals with the job, the activities, and the performance was not found.

New Principals

While data regarding elementary principals in general is scarce, studies addressing new principals are even more difficult to locate. In fact, no study focusing upon new principals could be found. The account which seemed to be most grounded in sound theory was the
article by Moffett (1979). This is a rather comprehensive record of a newly promoted elementary principal's thoughts in preparation for the first year in that position. A carefully detailed plan was presented focusing upon major aspects of the principalship; but in the end, questions regarding the outcome were not addressed. The statement given in retrospect is very brief and offers no discussion of important factors regarding the new principal's specific activities, time utilization, or performance.

**Women Principals**

Research has indicated that there are differences in the attitudes and behavior between male principals and female principals. In a survey of 82 elementary school administrators in Texas, Seifert and Beck (1981, p. 528) discovered that female principals were significantly more likely than men to describe themselves as strong instructional leaders. Also, female principals were more likely than males to believe that the principal could help teachers improve their teaching through evaluation procedures and that teachers should participate in developing their own evaluation plans.

Erickson and Reller (1979, p. 329) discussed the Florida Leadership Project which began in 1952. This was one of the first important studies addressing the administrative performance of women in education.

The most interesting findings of the study were that women tended to use both democratic practices and effective administrative practices more frequently than men. Women principals seemed to operate democratically 22 percent more often and in a more effective administrative
fashion 18 percent more of the time than their male counterparts. (Erickson & Reller, 1979, pp. 329-330)

In 1962, Hemphill, Griffiths, and Fredericksen (cited in Erickson & Reller, 1979, pp. 331-333) conducted a study involving 232 elementary principals in 16 states. Some comparisons were made in this study between men and women principals, as judged by subordinates and supervisors. The results indicated that both the subordinates and superordinates were more positive toward the women principals. Women were considered to be more thorough and careful in gathering information and relating it to the current situation and in involving teachers, supervisors, and outsiders in the decision-making process. Also, women principals appeared to be more concerned with the area of instruction, particularly the objectives of teaching, pupil participation, and evaluation. Erickson and Reller (1979) concluded, "In the important role of instructional leader, women principals seem to far outshine their male colleagues" (p. 333).

In general, this conclusion was supported by the findings of Gross and Trask (1976) in their study of 189 elementary principals in 41 school districts in 1964. They found that the sex factor had a direct influence on the amount and kinds of educational experiences principals brought to their roles. It was shown that women principals had taught more years than males before becoming an administrator, were older than males when first entering the principalship, and were less likely to have aspirations regarding advancement (pp. 217-218). Gross and Trask (1976, p. 218) also discovered
that the professional performance of teachers and the academic growth of students were higher in schools administered by women than by men. Women principals tended to place greater emphasis on the individual differences among students, the social and emotional development of pupils, and on assisting those pupils with special problems. Also, they performed more often than men in a supervisory manner. This study, however, showed that the sex factor was not related to the morale of the teachers or to attention to administrative duties (Gross & Trask, 1976, pp. 218-219).

The study by Gross and Harriott (cited in Erickson & Reller, 1979, pp. 337-338), done in 1965, tends to conflict with previous data. The researchers observed the degree to which principals possessed "Executive Professional Leadership" (EPL), which relates to improving the quality of staff performance. They attempted to discover whether leadership efforts of principals do have an effect. In studying one factor, they found no apparent relationship between EPL and sex. The findings in this study must, however, be weighed in light of the fact that EPL is not a direct measure of principals' performance and that its validity has been questioned.

Most of the evidence is supportive of the performance of women in the role of the principal. Data revealed, however, that the percentage of women principals has been steadily declining. Reporting the findings of the 1978 study by the National Association of Elementary Principals which surveyed 2,577 principals, Pharis and Zakariya (1979) found that "the typical principal is less and less likely to be a woman" (p. 4). In 1928, 55% of the elementary
principals were women. By 1958 that figure had dropped to 38%. The percentage had declined to 22% in 1968, and by 1978 the count was down to 18% (Pharis & Zahariya, 1979, pp. 4-5).

Self-Confidence and the Principalship

No studies could be located which specifically relate self-confidence with the role and performance of principals. According to Campbell et al. (1966), self-confidence implies "that a person feels he can do his job and that, with the help of those who share the mission with him, the job will be done in a superior fashion" (p. 337). Self-confidence is an aspect of self-concept, or self-image, or self-evaluation which an individual acquires, based upon his or her experiences. Boles and Davenport (1975) explained that self-concept is closely related to educational leadership.

The core of feelings and attitudes about oneself in great measure guides and directs that person's behavior. There is the further belief that desirable leader personality cannot be developed unless there is an adequate and stable development of the self-concept, and a leader's success is thought to be directly related to his or her self-concept. (p. 276)

Much of what can be said regarding self-confidence is based upon Maslow's hierarchy of human needs. Sergiovanni and Starratt (1971, p. 152-163) discussed this theory. Maslow's hierarchy arranges needs from the lowest level to highest level in the following order: physiological, safety, social, ego, and self-fulfillment. The theory indicates that behavior of individuals is to be understood in terms of the fulfillment of these needs.
Self-confidence is closely related to the ego need, which occupies one of the highest levels.

**Leader Style and the Principalship**

Much has been written concerning leadership and school administration. "Leadership directly touches the school's human organization, has a pronounced effect on each of the mediating variables, and is closely associated with school climate. In this sense, leadership is a potent force for increasing supervisory effectiveness" (Sergiovanni & Starratt, 1979, p. 98). Boles and Davenport (1975) defined leadership as "a process in which an individual takes initiative to assist a group to move toward production goals that are acceptable, to maintain the group, and to dispose of those needs of individuals within the group that impelled them to join it" (p. 117).

Returning to the early work of Weber, Boles and Davenport (1975) concluded that style "is a function of the personality and need-dispositions of the performer, and is related to his perceived source of authority" (p. 243).

Gibb (cited in Sergiovanni & Starratt, 1979, p. 111) identified two main types of leader style. The first is authoritarian, or defensive, and the other is known as participatory. The participatory style is based upon trust and confidence in people and reflects a person who views himself or herself as adequate and assumes others to be adequate and responsible, also. Traditionally, authors have identified two key dimensions associated with leader style. Sergiovanni and Starratt (1979) explained:
By and large experts agree that leadership style is defined by the extent to which the leader seems to show concern for, focuses on, or seems oriented toward getting work done or accomplishing tasks and the extent to which the leader seems to show concern for, focuses on, or seems oriented toward the needs or feelings of people and his or her relationships with them. (pp. 111-112)

These two dimensions—concern for production and concern for people—form the basis of the managerial grid developed by Blake and Mouton (1964, pp. 5-15). On the grid these two concerns and the range of interactions between them reflect an individual's reactions to various situations and are plotted on a 9-point scale, with 9 indicating maximum concern. Thus the "9,9" style reaches maximum concern for both people and production. The leader's style is viewed as a dominant set of managerial assumptions. "These assumptions orient his thinking and his behavior in dealing with production/people relationships" (Blake & Mouton, 1964, p. 13).

Teach...
of evaluation, but a similar proportion of teachers believed that renewal or cancellation of contracts is the real purpose. There appears to be some conflict, then, between the teachers' perceptions of the priorities and activities of the principal and the perceptions held by principals.

Supervisors' Perceptions of the Principalship

No studies could be found which specifically address the perceptions of the principal's supervisor as regard the activities of the principal. In general, it is believed that superintendents and other members of the central administrative staff consider the major function of the principal to be in the area of instruction (Howell, 1981, pp. 333-334). However, this perception may not reflect reality.

The Role and Activities of Principals

The role of the principal is extremely diverse, incorporating a variety of functions and activities. In describing the principal's role, Campbell et al. (1966) wrote:

He performs administrative tasks similar to those of a superintendent of schools, but he does so within the policy limits of the system. Instructional leadership, community relationships, staff personnel, pupil personnel, facilities, finance and business management, and organization are all areas in which tasks must be performed at the school-building level. (p. 225)

Several major categories of functions related to the principalship account for a majority of their time on the job and time in areas of advanced study. Lipham and Hoeh (1974, p. 10) identified
five categories: (1) instructional program, (2) staff personnel, (3) student personnel, (4) financial and physical resources, and (5) school-community relations.

There has been a recurring debate over whether principals are managers or instructional leaders. Manasse (1982) wrote:

Today, although principals may prefer to see themselves as instructional leaders, the reality is that they spend much of their time on management functions. Modern principals have incredibly complex jobs. Schools are expected to do more than ever before, to serve a greater mix of pupils, and to solve a variety of social problems. (pp. 10-11)

Mazzarella (1977) explained that role ambiguity is a deterrent to instructional leadership "because many principals are not sure what instructional leaders do or even if they ought to be instructional leaders at all" (p. 12). They may attempt to escape from this ambiguity "by immersing themselves in their administrative duties, becoming managers and disciplinarians rather than instructional leaders" (Mazzarella, 1979, p. 12).

The study by Seifert and Beck (1981) revealed that principals consider themselves as instructional leaders but that their teachers view them more as managers. In this study, 81% of the principals said that instructional leadership is their most important duty; however, only 31% of the teachers indicated that they see principals making leadership their top priority. The majority of principals and teachers agreed that the amount of time principals devote to instruction is less than 50%.

Howell (1981) reported the results of a three-phased study addressing principals' utilization of time. The first phase, which
dealt with middle schools and junior high schools, showed that paperwork was on the top of the list of activities according to time spent on the activity and that instructional leadership was on the bottom of the list. The second phase indicated that 32% of the principals' time was spent on office responsibilities. In the third phase of the study, 163 principals at all levels were surveyed for 2 days by checking their major activity during 30-minute intervals throughout the day (8:00 a.m. to 5:00 p.m.). Twenty-eight activities in seven categories were listed. The results indicated that the majority of principals were most often found to be in the office responding to communications and doing paperwork.

The most comprehensive study done recently dealing with how principals utilize their time and carry out their work was done in Chicago by Morris, Crowson, Hurwitz, and Porter-Gehrie in 1981 (cited in Manasse, 1982, pp. 11-13). The study involved direct observation of 16 principals for up to 12 days. It revealed that elementary principals spent 80% of their workday in face-to-face interaction with staff, pupils, and others; 8% of their time was spent on the telephone and 12% on paperwork. The elementary principal's day was characterized by considerable variety and many brief, unplanned interruptions. Wolcott (1973) also discussed the many interactions of the principal as he described his own experiences (see Table 1).

Concerning the utilization of time, Mazzarella (1977) reported:

One huge barrier to instructional leadership is lack of time for the instructional program. Many principals are burdened with such things as handling discipline problems,
Table 1
Utilization of Time by an Elementary Principal on a "Typical" Day

<table>
<thead>
<tr>
<th>Activity of principal</th>
<th>Observed day-to-day range</th>
<th>Percent of time in an &quot;average&quot; day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prearranged meeting or conference</td>
<td>13-35</td>
<td>26</td>
</tr>
<tr>
<td>Deliberate but not prearranged encounter</td>
<td>24-29</td>
<td>25</td>
</tr>
<tr>
<td>Casual or chance encounter</td>
<td>10-28</td>
<td>15</td>
</tr>
<tr>
<td>Telephoning</td>
<td>7-10</td>
<td>9</td>
</tr>
<tr>
<td>Alone and stationary (e.g., working in his office)</td>
<td>.6-1.5</td>
<td>1</td>
</tr>
<tr>
<td>Alone and enroute (e.g., going to a meeting, walking down the hall)</td>
<td>7-14</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>


According to McIntyre and Morris (1982, p. 422), research indicates that the more time one devotes to a certain task, the more effectively he or she is able to perform that task. This is probably true of building principals in their role as instructional leaders. "If principals are to improve instruction, they not only must be able to devote time to supervision but also must use that time effectively" (McIntyre & Morris, 1982, p. 422).
Not only do principals experience frustration from ambiguous and often conflicting role expectations, but also they recognize that there is a discrepancy between how they believe they should spend their time and how they actually do spend it. In a survey done in 1978 by the National Association of Secondary School Principals (cited in Manasse, 1982, p. 11), principals ranked personnel and program development as their two top priorities; however, they reported spending more time on school management. The effective principals in the sample came closer to using their time as they considered appropriate than did the others.

Perhaps setting priorities and managing time are among the important skills of effective principals, since effective principals seem able to manage all their many activities and still provide the leadership for effective instructional programs. They manage schools where children learn. (Manasse, 1982, p. 11)

Effective Schools

Effective schools have been defined in a number of ways. Little (cited in Stallings, 1982, p. 1) defined effectiveness in terms of achievement test scores. Others such as Edmonds (cited in Stalling, 1982, p. 1) have defined effectiveness in terms of how well the school meets the needs of "poor" or disadvantaged students. Stallings (1982, pp. 1-2) described effective schools as those in which: (a) teacher morale is high, (b) teachers and students are absent less frequently, (c) teachers and students find school a friendly place, and (d) there is less litter and vandalism.
The 1954 Supreme Court decision that separate is not equal brought public attention on the schools, and "schools became the focus of social change and the battleground for community struggles" (Piñero, 1982, p. 17). Then, in 1966, the Coleman Report was published, which cast doubt on whether schools actually make a difference in the educational lives of students and challenging the ability of schools to effectively do the job (Piñero, 1982, p. 17). In 1971, Weber pioneered work in the area of effective schools (Curran, 1982, p. 16). Recently, new studies have indicated that schools do matter and have shown how they can matter. "The effective schools research has shown that properly-run schools can improve the academic performance of any youngster. More specifically, it has shown that we can teach any child who comes through the door and that we know how to teach him" (Curran, 1982, p. 16).

Several characteristics of effective schools have been identified in studies. Piñero (1982, p. 17) and Curran (1982, p. 16) listed the following: (a) strong instructional leadership, (b) a safe, orderly atmosphere, (c) clear goals with emphasis on basic skills, (d) high expectations for student achievement, and (e) continuous assessment of pupil performance. Shoemaker (cited in Lezotte, 1982, pp. 27-28) added to these the students' time on task and home-school relations. The importance of utilization of time was stressed when Curran (1982) wrote, "If we want to isolate the most important resource, it has been found to be time--time on teaching, time on learning, time on task--not money" (p. 16).

Edmonds, Rutter, and Little (cited in Stallings, 1982, p. 2) all...
found that staff collaboration is also an essential ingredient in effective schools. Studies by Stallings (1982, pp. 3-4) indicated that a supportive style of leadership on the part of the principal and respect for teachers as professionals tend to enhance teacher effectiveness. It was also found that teachers' contact with the principal through interactive, problem-solving meetings is important. Further, it was reported that when principals limit classroom intrusions, more time is spent on teaching and learning, thus, facilitating school effectiveness.

Effective Principals

To a great degree it is the principal who is responsible for school effectiveness. "All of the factors consistently identified as characteristic of effective schools . . . are either directly or indirectly related to the effectiveness of principals" (Manasse, 1982, p. 10).

Several characteristics of effective principals were listed by Manasse (1982): "Effective principals tend to have high energy levels, to be willing to work long hours, to be good listeners and observers and skilled information processors, and to have well-developed expressive and interpersonal skills" (p. 15). Effectiveness, however, goes beyond these qualities. The evidence suggests that effective principals are actively involved in the instructional program. Piñero (1982, p. 19) cited several ways that this may be accomplished, including the following: (a) concentrate time and effort on instructional concerns, (b) establish and communicate
clear goals, (c) maintain high expectations, (d) emphasize basic skills, and (e) buffer the faculty from undue pressure.

It is too early to arrive at a specific prescription for effective principaling—if indeed, given the variety of school settings, one can ever be devised. However, the evidence indicates that effective principals tend to be actively involved in their school's instructional program. (Piñero, 1982, p. 19)

Effective schools reflect a sense of purpose and direction based on clearly defined goals. It is the principal who establishes the goals for the school. To do this he/she must have a clear vision of where the school is going, be able to analyze problems, and utilize political and managerial skills necessary for the planning process (Manasse, 1982, p. 14). Manasse (1982, p. 14) explained that the personal vision of effective principals allows them to avoid becoming consumed by second-order priorities and to make management decisions that promote student learning. "Effective principals influence the overall instructional program and the specific learning objectives of students and staff by keeping their vision always before them and integrating as many of their activities as possible toward their goals" (Manasse, 1982, p. 14).

Effective principals "create images of their schools as they would like them to be" (Manasse, 1982, p. 15). Then they employ all of their understanding and abilities, structure their work, and adapt their leader style to make those dreams come true.
Rationale

The literature supports the concept that school effectiveness is closely related to principal effectiveness. The role, activities, and utilization of time of the elementary principal is, then, a subject worthy of consideration and research. The study of this topic is important to both the educational system and to the individuals aspiring to the principalship and those currently serving in that position.

It appears that principal effectiveness is made up of a number of factors, some of which have not yet been fully investigated. One of the possible considerations this study has explored is length of time in the position. It might be assumed that individuals who are relatively new to the principalship would espouse and practice effectiveness-related activities to a greater extent than those having more experience. There are two major reasons supporting such an assumption. First, being new to the position may mean that an individual has been exposed to the current research and the emphasis on school and principal effectiveness through advanced training, inservice education, or on-the-job training. Thus, his/her awareness and attitudes regarding the area of effectiveness may have been enhanced. Second, the Hawthorne effect may be present since individuals who are new to a job are generally aware that they are being "observed."

Another possible factor which was addressed in this study is the sex of the principal. The literature suggests
that the women principals have a somewhat better performance record than their male counterparts. It might, therefore, be assumed that women principals are more attentive to effectiveness-related activities.

Self-confidence of the principal is yet another possible factor which was investigated in this study. It is believed that a person's positive feelings about himself or herself and the degree of assuredness enhance his or her performance and leader personality. Thus, it might be assumed that principals with a high level of self-confidence will tend to direct their efforts toward effectiveness-related activities to a greater extent than those principals with a lower level of self-confidence.

An additional factor possibly associated with principal effectiveness is leader style. In general, it is accepted that an individual's style has an influence on his or her attitudes and behavior regarding task orientation and relationships orientation. Therefore, it might be assumed that principals whose leader style reflects maximum concern for both production and people will emphasize effectiveness-related activities to a greater degree than those principals with other leader styles. This study, involving one specific group of principals, provides information regarding these considerations.

**Operational Definitions**

*Elementary principal:* administrator of a school which accommodates students in any of the grades kindergarten through sixth.
New principal: an elementary principal who has served 5 years or less as a building administrator.

Experienced principal: an elementary principal who has served 6 years or more as a building administrator.


Self-confidence: sense of assuredness as indicated on the Adjective Check List by Gough and Heilbrun (cited in Lake, Miles, & Earl, 1973, pp. 7-9).

Leader style: managerial assumptions and behavior as indicated on the managerial grid (Blake & Mouton, 1964, pp. 5-15).

Supervisor: the individual to whom the principal directly reports.

Teacher: a certificated, full-time member of the staff of an elementary school.

Operational Hypotheses

The following hypotheses were included in this study:

1. The ranking of perceived importance of 10 areas of job activities will indicate a difference in the amount of effectiveness-related statements in the top five positions between new principals...
and experienced principals.

2. The ranking of perceived importance of 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for female principals than for male principals.

3. The ranking of perceived importance of 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for self-confident principals than for less self-confident principals (as measured on the Adjective Check List).

4. The ranking of perceived importance of 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for principals with an effective leader style—maximum concern for production and people—than for principals with less effective leader styles (as indicated on Blake and Mouton's managerial grid).

5. The log of participation in 10 areas of job activities will indicate a difference in the amount of effectiveness-related statements in the top five positions between new principals and experienced principals.

6. The log of participation in 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for female principals than for male principals.

7. The log of participation in 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for self-confident principals than for less self-confident principals.
8. The log of participation in 10 areas of job activities will indicate more effectiveness-related statements in the top five positions for principals with an effective leader style than for principals with less effective leader styles.

9. There is a relationship between how principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five positions on the ranking and log of 10 areas of job activities.

10. There is a relationship between how new principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five positions on the ranking and log of 10 areas of job activities. There is also a relationship for experienced principals. These relationships are different.

11. There is a direct relationship between how female principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five positions on the ranking and log of 10 areas of job activities. There is also a relationship for male principals. The relationship is higher for female principals.

12. There is a direct relationship between how self-confident principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five
positions on the ranking and log of 10 areas of job activities. There is also a relationship for less self-confident principals. The relationship is higher for self-confident principals.

13. There is a direct relationship between how principals with an effective leader style perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five positions on the ranking and log of 10 areas of job activities. There is also a relationship for principals with less effective leader styles. The relationship for principals with an effective leader style is higher.

14. There is a relationship between the ranking of elementary principals and the ranking of their supervisors regarding the priority of various job activities associated with the principalship, including those activities based on principal effectiveness.

15. There is a relationship between the ranking of elementary principals and the ranking of their teachers regarding the priority of various job activities associated with the principalship, including those activities based on principal effectiveness.

Summary

Various topics relating to the role, characteristics, and effectiveness of elementary principals were investigated and discussed in this chapter. The quantity of empirical data available does not appear to be commensurate with the potential impact of the position of the principalship. Some studies have been conducted
which address principals' role and activities and their utilization of time, and there have been a few studies which pursue the characteristics and style of principals. Also, an increasing amount of literature has recently appeared regarding effective schools and effective principals. However, it was not found that these concerns have been synthesized into one project which demonstrates the interrelatedness of these areas. This, then, became one of primary tasks of the current investigation.
CHAPTER III

DESIGN AND METHODOLOGY

Population and Sample

The target population of this study was elementary principals, and the accessible population was all elementary principals in the public schools in Berrien County, Michigan. There are 16 districts within the county, and these districts range in size from a pupil enrollment of 40 to 8,376. The districts are basically in an urban/suburban area which reflects considerable diversity. Both agriculture and industry are present in the area. There is also diversity among the districts in many respects, such as area, population characteristics, financial base, and student achievement.

There was a total of 42 elementary principals—27 men and 15 women—in the county selected for the study. A stratified random sampling plan was utilized in the selection of 20 subjects for this study. The subpopulations for the sampling plan were: (a) males who have served 5 years or less as principal, (b) males who have served 6 years or more as principals, (c) females who have served 5 years or less as principal, and (d) females who have served 6 years or more as principal. Five subjects were drawn randomly from each of these groups, using the table of random numbers from Borg and Gall (1979, pp. 734-736).
Data Collection

Study Design

A survey research design incorporating an interview process was utilized in this study. The first step involved contacting the office of the superintendent of the county intermediate school district. A brief discussion of the survey was presented and a request was made for information regarding elementary principals in the county, such as names, district of employment, school addresses and telephone numbers, sex, and length of service. The intermediate directory was made available to facilitate the acquisition of this information. The only necessary information not available in the directory was the length of service in the position for each principal. This was readily available through telephone contacts with the superintendent's office in each district.

The next step involved selection of the stratified random sample. After the sample had been established, a letter of inquiry was sent to the superintendents of those districts where sample members were employed (see Appendix A). In the letter, approval was sought to conduct the survey within the district; also, the name(s) of sample members employed in the district received mention. The ranking instrument as described in the section "Supervisors' Ranking of Principals' Activities" accompanied the letter to the superintendents (see Appendix B). Follow-up telephone conversations were made with the superintendents to further clarify the nature of the project. When approval was granted and acknowledgment was sent to the
superintendents (see Appendix C), a letter explaining the survey and seeking participation was sent to the principals who were to be involved in the survey (see Appendix D). Personal contact followed the letter, and appointments for the interviews were arranged.

**Instrumentation**

A number of instruments were used to collect the data necessary for this study. Information relevant to the instruments is presented in the following discussion. The sequence of steps for the interviews is also outlined (see Appendix E).

**Supervisors' ranking of principals' activities.** The letter to the superintendents of those districts employing sample members was accompanied by a ranking instrument of the activities of their principal(s) in the sample (see Appendix B). The superintendent—or the immediate supervisor of the principals—was requested to rank 10 statements describing activities associated with the principalship, according to his perceptions of the priorities in the buildings(s) under consideration. This instrument is discussed in detail in the section "Activities of the Elementary Principal." Some follow-up contacts were necessary to insure the return of all the supervisors' rankings.

**Background information.** The first phase of the principals' interview included the introduction and the gathering of background information. It was necessary to spend a few minutes "getting acquainted," during which time the interviewer attempted to establish
rapport, present the purpose of the study, discuss the confidentiality of the information, and encourage the subject's interest and commitment. The researcher then recorded relevant background information regarding each subject. This included the following: (a) gender, (b) number of years of teaching experience, (c) highest degree earned, and (d) number of students in his/her school.

**Adjective Check List.** The Adjective Check List (ACL) was then presented. This instrument is comprised of a list of 300 adjectives. From the list the subjects mark those which they believe are descriptive of themselves. This can be completed in approximately 15 minutes (Lake, Miles, & Earle, 1973, p. 7).

The ACL has its roots in the work of R. B. Cattell and his studies of personality structure and was also influenced by the viewpoints of Freud, Jung, Mead, and Murray as they considered personality (Gough & Heilbrun, 1980, p. 2). Altogether, scores for 37 scales may be obtained on the ACL. Raw scores are converted to standard scores separately for subgroups defined by sex and by the number of adjectives checked. The standard scores are then plotted on a profile sheet (Gough & Heilbrun, 1980, pp. 2-3).

The scale utilized in the current study was the self-confidence scale. Individuals who score high in the area of self-confidence on the ACL are initiators and have confidence in their ability to achieve goals. Those with low scores have difficulty mobilizing resources and taking action. They are perceived as shy, inhibited, and withdrawn (Gough & Heilbrun, 1980, p. 17).
The norms for the ACL were established using 5,238 male and 4,144 female subjects. The two normative samples were diversified in age, education, occupation, intelligence, and social status; however, they were established arbitrarily and may not be representative of the general population (Gough & Heilbrun, 1980, p. 29). The reliability of the instrument is shown with the alpha coefficients calculated to determine the correlation of the scales, with samples of 591 males and 588 females. The median coefficient for males was .76, and for females it was .75 (Gough & Heilbrun, 1980, p. 30). In another situation, test-retest correlations showed a median of .65 for males and .71 for females. For the self-confidence scale the alpha coefficients were .79 for males and .77 for females, and the test-retest coefficients were .68 and .78, respectively (Gough & Heilbrun, 1980, p. 31).

As regards validity, correlations between the ACL and instruments such as Edwards Personal Preference Schedule, California Personality Inventory, and the Minnesota Multiphasic Personality Inventory have tended to yield inconclusive results (Lake et al., 1973, p. 8). Rorer (cited in Buros, 1972) concluded, "If you want to use an adjective check list with moderate, noncontroversial terms appropriate for reasonably intelligent, well-educated subjects, you could use the ACL" (p. 77).

Styles of Management Inventory. The next step was the administration of the Styles of Management Inventory by Hall, Harvey, and Williams (cited in Pfeiffer, Heslin, & Jones, 1976, pp. 290-291).

This instrument identifies leader styles which coincide with those
plotted on the managerial grid (Blake & Mouton, 1964). Twelve situational statements are presented, each with five possible responses. Subjects indicate on a continuum the degree to which each response is characteristic of themselves. A period of approximately 25 minutes is required to complete this survey.

In the scoring of the Styles of Management Inventory, raw scores are converted to T-scores. A profile sheet is then developed for each subject using the T-scores. Five managerial styles are addressed; and the individual's style preference, style strength, and "back-up" styles can be considered (Hall, Harvey, and Williams, 1980, p. 1).

The size of the normative sample for this instrument was 4,819. The median coefficient of stability ranges from .69 to .74. The Styles of Management Inventory discriminates between high, average, and low achieving managers and between 13 organizational types. Construct validity of the instrument is high, as indicated in an analysis with the Minnesota Multiphasic Personality Inventory which revealed two functions significant at the .038 and .09 levels of confidence (Styles of Management Inventory, 1983).

**Activities of the Elementary Principal.** The instrument which was then used, entitled "Activities of the Elementary Principal," is a ranking of 10 statements developed by the writer (see Appendix F). With this instrument, participants are requested to arrange 10 index cards—each containing a statement—in order of priority (first being the highest) as to how they believe elementary principals
should spend their time. The statements identify 10 functions which include 33 specific activities associated with the principalship. Five of the statements are based upon the literature on school and principal effectiveness. They are: (1) staff planning and sharing, (2) instructional-related activities, (3) student achievement, (4) communications, and (5) learning environment. The other five are taken from literature describing the nature of the functions principals perform, from dialogue with several principals, and from the writer's own observations and experiences as an elementary teacher for over 15 years and a principal for a year and a half. These five areas are: (1) direct supervision of students, (2) meetings, (3) discipline, (4) paperwork, and (5) fund-raising projects. The one item which did not appear in any of the reports which were considered is "fund-raising projects." It was incorporated on the list because it has been directly observed as an activity in which principals participate and because economic concerns in certain localities have apparently increased the likelihood of principals' direct involvement in such projects. The sequence of statements as they appear on the list was arbitrarily developed, having effectiveness-related items interspersed with the others so as not to present any preconceived order of priority. This ranking takes no longer than 5 minutes to administer.

Log of Activities. The final instrument for the principals, entitled "Log of Activities," was also prepared by the writer and includes the same 10 areas as the ranking, with 33 specific
activities listed under the various areas (see Appendix G). The log indicates half-hour time blocks from 8:00 a.m. until 5:00 p.m.
Respondents were given two log sheets and randomly assigned 2 days during which time activities were to be checked that best describe how the principals spent their time during each half hour. The suggestion was made to each principal that his/her secretary maintain the log for the appropriate 2-day period so as to minimize the principal's record keeping and time spent on this project. This decision, however, resided with the individual principals. If the principal so desired, the secretary was invited to join the meeting so that the procedure for keeping the log could be explained to both principal and secretary. Instructions were given to return the log to the researcher in the envelope provided. This portion of the interview required approximately 10 minutes. After the interview, follow-up with personal contact was necessary in order to secure the return of all the logs.

**Teachers' ranking of principals' activities.** Principals were then asked to allow their teachers to complete the ranking instrument. They were shown the cover letter prepared for the teachers and the instrument (see Appendices H and I). On this form, teachers were asked to rank the 10 statements according to their perceptions of the priorities in their building. After completing the forms anonymously, teachers were to return them to the researcher in the prepared, enclosed envelopes. When permission was granted by the principal, these instruments were distributed to teachers—via their
"mailboxes"—with the assistance of the principal or secretary.

Conclusion of the interview. The interview concluded with an open-ended question. Principals were asked: What hindrances might keep you from doing all that you believe you should be doing as a principal? Approximately 5 minutes was required to complete this activity. The researcher's appreciation was expressed to the principal, and the value of the information gathered was indicated as the interview drew to a close (see Appendix J).

Concern regarding ranking and log. It is understood that data collected through the use of the ranking and the log, address quantity of time or participation on various activities. The quality of that time or participation is not specifically addressed in this study.

Pilot Study

The ranking and log instruments which were an integral part of the study were field tested in a pilot project in March of 1983. The pilot study addressed one factor which may be related to principal effectiveness—length of time in that position. Specifically, the study investigated the relationship between the priorities and activities of elementary principals and their years of service. Four hypotheses were developed and tested. The ranking and log were utilized in a mail questionnaire survey to ascertain the perceived priorities and actual activities of principals.
The subjects of the pilot study were all elementary principals in a school district of moderate size in Indiana. There was a total of 23 elementary principals—19 men and four women—in this district. They had experience ranging from 1 to 29 years in that position, and the population was approximately equally divided between new principals and experienced principals. Fourteen of the 23 individuals to whom the questionnaire was sent responded.

Because of small sample sizes, meaningful analysis and interpretation of the data were difficult. However, the results indicated the following points, corresponding to the four hypotheses:

1. There was no apparent difference between new principals and experienced principals in the ranking of importance of job activities, including those based on principal effectiveness. (It was noted that the principals who participated in this study all appear to have a clear understanding of their educational priorities, based upon their high ranking of effectiveness-related concepts.)

2. There was no apparent difference between new principals and experienced principals in the log of time spent on various activities, including those based on principal effectiveness.

3. There did not appear to be a direct relationship between how principals perceived that they should spend their time and how they actually did spend their time; rather, the study showed a slightly negative correlation.

4. No determination could be made as to whether there was a difference between new principals and experienced principals in the relationship between how they perceive that they should spend their
time and how they actually did spend their time.

The results of the first three hypotheses tended to be in the opposite direction of what had been hypothesized. Problems associated with instrumentation and data collection were considered as possible explanations for this occurrence. The greatest area of concern was the small sample size for the new principals. The amount of missing data also aroused concern. Sixty-one percent of the principals surveyed responded, but 39%—a rather sizable proportion—chose not to participate. Further, some respondents did not complete the log or completed it incorrectly; also, some did not enter the number of years of service as a principal. Speculation regarding these problems included several considerations:

1. Some of the principals surveyed may have considered that completing two instruments required too extensive an involvement.

2. Since there were some respondents who completed the ranking but not the log or who completed the log incorrectly, there may have been problems associated with the log, such as its clarity or length.

3. Some individuals may simply have been reluctant to record their activities, and others may have forgotten.

4. Since a number of respondents did not record the number of years they have been in the principalship, it may be concluded that some individuals possibly did not see this question or did not wish to reveal this information. (It may be speculated that perhaps new principals are somewhat reluctant to share information regarding length of service since only two respondents indicated length of
service which placed them in the "new" category.)

5. Principals may have been particularly busy during the time the survey was received.

These problems and considerations identified in the pilot study provided insight regarding collection of data for the actual research project. The benefits of using an interview technique rather than a mail questionnaire were quite apparent. The interview eliminates the problem of nonrespondents and missing data, and it also lessens the likelihood of gathering incorrect data.

Summary

This section of the paper has dealt with the design of the study. The subjects—a stratified random sample of 20 elementary principals—were drawn from the population of elementary principals in Berrien County, Michigan. Four subgroups of equal size were formed, based upon gender and experience in the principalship. An interview was conducted with each principal, during which time the subjects responded to four instruments: (1) a list of adjectives which assesses certain personality characteristics, (2) an inventory which identifies leader style, (3) a ranking of the importance of job-related activities, and (4) a log of daily activities. Also, each principal's supervisor and teachers were requested to complete the ranking of activities as relates to that principal. The section concluded with a synopsis of a pilot study conducted earlier to explore the nature of the design of the investigation and the utilization of the ranking and the log. It was the pilot study that
prompted the researcher to focus upon the interview technique for the current investigation.
CHAPTER IV

DATA ANALYSIS

Techniques and Tools

A one-way analysis of variance (ANOVA) was utilized with Hypotheses 1 through 4 to decide whether there was a difference in the ranking of the priority of job activities between new principals and experienced principals, between male principals and female principals, between self-confident principals and less self-confident principals, and between principals with an effective leader style (9,9 on the managerial grid) and those with less effective leader styles. The mean score for each group on the ranking was determined by the number of effectiveness-related statements that individuals placed in the top five positions on a 10-item ranking. An ANOVA was employed since it reflects differences in sample means. Changes in the dependent variable (score on the ranking in Hypotheses 1 through 4) are believed to be the consequences of changes in the independent variable (sample group membership). Hinkle, Wiersma, and Jurs (1979, pp. 242-265) were the source of information for this procedure.

A one-way ANOVA was also utilized with Hypotheses 5 through 8 to decide whether there was a difference in the log of participation in job activities between new principals and experienced principals, between male principals and female principals, between self-confident
principals and less self-confident principals, and between principals with an effective leader style (9,9 on the managerial grid) and those with less effective leader styles. The mean score for each group on the log was determined by the number of effectiveness-related statements that individuals placed in the top five positions on a log with 10 major categories. (Since the participants maintained the log for a 2-day period, the average of the two scores was taken to determine the score for the log.) Changes in the dependent variable (score on the log in Hypotheses 5 through 8) are believed to be the consequences of changes in the independent variable (sample group membership).

The Pearson product-moment correlation coefficient (Pearson-\( r \)) was used in connection with Hypothesis 9 to determine whether there was a relationship between how principals perceive that they should spend their time and how they actually did spend their time. The Pearson-\( r \)—the measure of the relationship between two variables, or two sets of data—described the relationship between the score on the ranking and the score on the log for the participants in this survey. These scores were determined by the number of effectiveness-related statements identified in the top five positions on the ranking and the log of areas of job activities. The source of information for this procedure was Hinkle et al. (1979, pp. 70-88; 176-183).

In testing Hypotheses 10 through 13 a comparison of the correlation coefficients was made according to the test for a two-sample case with independent samples (Hinkle et al., 1979, pp. 223-226). The Pearson-\( r \) between the score on the ranking and the score on the
log was needed for each group. These scores were determined by the number of effectiveness-related statements identified in the top five positions on the ranking and the log of 10 areas of job activities. Then, an attempt was made to demonstrate that the correlation between how principals perceive that they should spend their time and how they actually do spend their time is different for new principals and experienced principals, for male principals and female principals, for self-confident principals and less self-confident principals, and for principals with an effective leader style (9,9 on the managerial grid) and those with less effective leader styles.

With Hypothesis 14, the Pearson-\(r\) was used to determine whether there was a relationship between the ranking of elementary principals and the ranking of their supervisors regarding the priority of various job activities associated with the principalship. Hypothesis 15, which addresses the relationship between the ranking of elementary principals and the ranking of their teachers, was tested in the same manner. In both of these cases the scores on the ranking were determined by the number of effectiveness-related statements identified in the top five positions. It should be noted that an \(\alpha\) level of .05 was used in all situations throughout the study.

The Statistical Package for Social Sciences (SPSS), version 9.1 (1982), was used in carrying out the analysis of the data. Running the program was completed on the DECsystem-1099 computer at Western Michigan University. Services of the computer center staff at the University were available.
Background Information Regarding Data

Data and findings from the study are compiled in this section of the report. For each hypothesis relevant testing is described, and operational statements are cited. The interpretation and discussion of the findings will follow in the next section. First, however, pertinent information that will provide additional background and insight regarding the results is briefly mentioned.

Consent to conduct the survey in the various districts was granted from all of the school districts in Berrien County which employed principals selected in the random sample. In all, 11 districts were involved. Of those members of the population who were drawn to be part of the sample, 100% agreed to participate; further, 100% response from all the principals drawn in the sample was achieved in all aspects of the study. Also, there was 100% response on the ranking from superintendents or other supervisors. The teachers' survey had a response rate of slightly over 63%, with 370 rankings being sent to teachers and 234 returned. Of the 234 returning the ranking, nine individuals had destroyed the code letter on the envelope which indicated the identity of their principal, and 53 had completed the instrument incorrectly. In those cases where the ranking was spoiled, it appeared that teachers had assigned a number to each statement independently, using some numbers more than once, rather than ranking the 10 statements 1 through 10 inclusively. This study was conducted toward the end of the school year; thus, follow-up to
secure responses from those teachers who were nonrespondents was not feasible because of the ensuing vacation period following the close of school.

Compilation of Data

Hypothesis 1. In the first hypothesis, the researcher attempted to demonstrate that the mean score (μ) on the ranking of perceived importance of job activities would indicate a difference between new principals (n) and experienced principals (e) in the number of effectiveness-related statements in the top five positions. Symbolically, this may be stated as follows:

\[ H_0: \mu_n = \mu_e \]
\[ H_a: \mu_n \neq \mu_e \]

The mean and standard deviation for both groups are shown in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>New principals</td>
<td>10</td>
<td>4.3000</td>
<td>.4830</td>
</tr>
<tr>
<td>Experienced principals</td>
<td>10</td>
<td>4.6000</td>
<td>.5164</td>
</tr>
</tbody>
</table>

A one-way analysis of variance was utilized to decide whether there was a difference in the ranking between new principals and experienced principals. The results are shown in Table 3.
Table 3

Analysis of Variance Between Mean Score on Ranking for New Principals and Experienced Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.4500</td>
<td>1</td>
<td>.4500</td>
<td>1.800</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>4.5000</td>
<td>18</td>
<td>.2500</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.9500</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .1964 > .05.

p < .05.

Hypothesis 2. With the second hypothesis, an attempt was made to demonstrate that the mean score (μ) on the ranking of perceived importance of job activities would indicate more effectiveness-related statements in the top five positions for female principals (f) than for male principals (m). This may be stated symbolically as follows:

\[ H_0: \mu_f = \mu_m \]
\[ H_a: \mu_f > \mu_m \]

The mean and standard deviation for both groups are shown in Table 4.

A one-way ANOVA was used to determine whether there was a difference in the ranking between female principals and male principals. The results are shown in Table 5. (Note: The F-prob. is divided by 2 because a one-tailed test was used in this directional hypothesis.)
Table 4
Mean and Standard Deviation of Scores on Ranking for Female Principals and Male Principals

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female principals</td>
<td>10</td>
<td>4.5000</td>
<td>.5270</td>
</tr>
<tr>
<td>Male principals</td>
<td>10</td>
<td>4.4000</td>
<td>.5164</td>
</tr>
</tbody>
</table>

Table 5
Analysis of Variance Between Mean Score on Ranking for Female Principals and Male Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.0500</td>
<td>1</td>
<td>.0500</td>
<td>.184</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>4.9000</td>
<td>18</td>
<td>.2722</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.9500</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .6733 ÷ 2 = .3367 > .05.

$F < .05$.

Hypothesis 3. The researcher attempted to demonstrate in the third hypothesis that the mean score ($\mu$) on the ranking of perceived importance of job activities would indicate more effectiveness-related statements in the top five positions for self-confident principals (c) than for less self-confident principals (lc). The symbolic representation for this is as follows:
The mean and standard deviation for the groups are presented in Table 6.

### Table 6

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-confident principals</td>
<td>12</td>
<td>4.2500</td>
<td>.4523</td>
</tr>
<tr>
<td>Less self-confident principals</td>
<td>8</td>
<td>4.7500</td>
<td>.4629</td>
</tr>
</tbody>
</table>

A one-way ANOVA was used to decide whether there was a difference in the ranking between self-confident principals and less self-confident principals. Table 7 shows the results. (Note: The F-prob. is divided by 2 because a one-tailed test was used in this directional hypothesis.)

**Hypothesis 4.** With the fourth hypothesis, an attempt was made to demonstrate that the mean score \( (\mu) \) on the ranking of perceived importance of job activities would indicate more effectiveness-related statements in the top five positions for principals with an effective leader style \( (s) \) than for principals with less effective leader styles \( (ls) \). Symbolically, this may be stated as
follows:

\[ H_0: \mu_s = \mu_{ls} \]

\[ H_a: \mu_s > \mu_{ls} \]

Table 8 shows the mean and standard deviation for both groups.

Table 7

Analysis of Variance Between Mean Score on Ranking for Self-Confident Principals and Less Self-Confident Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>1.2000</td>
<td>1</td>
<td>1.2000</td>
<td>5.760</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>3.7500</td>
<td>18</td>
<td>.2083</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.9500</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( F\)-prob. = .0274 \times 2 = .0137 < .05.

\( p < .05. \)

Table 8

Mean and Standard Deviation of Scores on Ranking for Principals with Effective Leader Style and Principals with Less Effective Leader Styles

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals with</td>
<td>2</td>
<td>4.0000</td>
<td>.0000</td>
</tr>
<tr>
<td>effective style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principals with</td>
<td>18</td>
<td>4.5000</td>
<td>.5145</td>
</tr>
<tr>
<td>less effective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>styles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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A one-way analysis of variance was used to decide whether there was a difference in the ranking between principals with an effective leader style and those with less effective leader styles. The results are shown in Table 9. (Note: The F-prob. is divided by 2 because a one-tailed test was used in this directional hypothesis.)

### Table 9

**Analysis of Variance Between Mean Score on Ranking for Principals with Effective Leader Style and Principals with Less Effective Leader Styles**

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.4500</td>
<td>1</td>
<td>.4500</td>
<td>1.800</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>4.5000</td>
<td>18</td>
<td>.2500</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.9500</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .1964 ÷ 2 = .0982 > .05.

p < .05.

**Hypothesis 5.** With the fifth hypothesis, an attempt was made to demonstrate that the mean score (μ) on the log of participation in various job activities would indicate a difference between new principals (n) and experienced principals (e) in the number of effectiveness-related statements in the top five positions. The symbolic representation for this is as follows:

- \( H_0: \mu_n = \mu_e \)
- \( H_a: \mu_n \neq \mu_e \)
The mean and standard deviation for both groups are shown in Table 10.

Table 10

Mean and Standard Deviation of Scores on Log for New Principals and Experienced Principals

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>New principals</td>
<td>10</td>
<td>3.0500</td>
<td>.7246</td>
</tr>
<tr>
<td>Experienced principals</td>
<td>10</td>
<td>3.0000</td>
<td>.6236</td>
</tr>
</tbody>
</table>

A one-way ANOVA was utilized in deciding whether there was a difference in the log between new principals and experienced principals. The results are shown in Table 11.

Table 11

Analysis of Variance Between Mean Score on Log for New Principals and Experienced Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.0125</td>
<td>1</td>
<td>.0125</td>
<td>.027</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>8.2250</td>
<td>18</td>
<td>.4569</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.2375</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .8705 > .05.

p < .05.
Hypothesis 6. An attempt was made in the sixth hypothesis to demonstrate that the mean score ($\mu$) on the log of participation in various job activities would indicate more effectiveness-related statements in the top five positions for female principals ($f$) than for male principals ($m$). Symbolically, this may be stated as follows:

$$
H_0: \mu_f = \mu_m \\
H_a: \mu_f > \mu_m
$$

Table 12 shows the mean and standard deviation for the groups.

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female principals</td>
<td>10</td>
<td>2.9000</td>
<td>.6583</td>
</tr>
<tr>
<td>Male principals</td>
<td>10</td>
<td>3.1500</td>
<td>.6687</td>
</tr>
</tbody>
</table>

A one-way ANOVA was utilized in determining whether there was a difference in the log between female principals and male principals. The results are shown in Table 13. (Note: The $F$-prob. is divided by 2 because a one-tailed test was used in this directional hypothesis.)
Table 13

Analysis of Variance Between Mean Score on Log for Female Principals and Male Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.3125</td>
<td>1</td>
<td>.3125</td>
<td>.710</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>7.9250</td>
<td>18</td>
<td>.4403</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.2375</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .4106 ÷ 2 = .2053 > .05.

p < .05.

Hypothesis 7. In the seventh hypothesis, an attempt was made to demonstrate that the mean score (μ) on the log of participation in various job activities would indicate more effectiveness-related statements in the top five positions for self-confident principals (c) than for less self-confident principals (lc). This may be shown symbolically as follows:

\[ H_0: \mu_c = \mu_{lc} \]
\[ H_a: \mu_c > \mu_{lc} \]

Table 14 shows the mean and standard deviation for both of the groups.

A one-way ANOVA was used to determine whether there was a difference in the log between self-confident principals and less self-confident principals. The results are shown in Table 15. (Note:
The F-prob. is divided by 2 because a one-tailed test was used in this directional hypothesis.)

Table 14
Mean and Standard Deviation of Scores on Log for Self-Confident Principals and for Less Self-Confident Principals

<table>
<thead>
<tr>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-confident principals</td>
<td>12</td>
<td>3.2500</td>
</tr>
<tr>
<td>Less self-confident principals</td>
<td>8</td>
<td>2.6875</td>
</tr>
</tbody>
</table>

Table 15
Analysis of Variance Between Mean Scores on Log for Self-Confident Principals and Less Self-Confident Principals

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>1.5187</td>
<td>1</td>
<td>1.5187</td>
<td>4.069</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>6.7187</td>
<td>18</td>
<td>.3733</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.2375</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ F\text{-prob.} = .0588 \div 2 = .0294 < .05. \]
\[ p < .05. \]
Hypothesis 8. With the eighth hypothesis, the researcher attempted to demonstrate that the mean score ($\mu$) on the log of participation in various job activities would indicate more effectiveness-related statements in the top five positions for principals with an effective leader style ($s$) than for those with less effective leader styles ($ls$). This may be stated symbolically as follows:

$$H_0: \mu_s = \mu_{ls}$$

$$H_a: \mu_s > \mu_{ls}$$

The mean and standard deviation for the groups are shown in Table 16.

<table>
<thead>
<tr>
<th></th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals with effective style</td>
<td>2</td>
<td>3.2500</td>
<td>.3536</td>
</tr>
<tr>
<td>Principals with less effective styles</td>
<td>18</td>
<td>3.0000</td>
<td>.6860</td>
</tr>
</tbody>
</table>

A one-way analysis of variance was used in determining whether there was a difference in the log between principals with an effective leader style and those with less effective leader styles. Table 17 shows the results. (Note: The $F$-prob. is divided by 2
because a one-tailed test was used in this directional hypothesis.)

Table 17

Analysis of Variance Between Mean Scores on Log for Principals with Effective Leader Style and Principals with Less Effective Leader Styles

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between (Treatment)</td>
<td>.1125</td>
<td>1</td>
<td>.1125</td>
<td>.249</td>
</tr>
<tr>
<td>Within (Error)</td>
<td>8.1250</td>
<td>18</td>
<td>.4514</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.2375</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-prob. = .6237 ÷ 2 = .3119 > .05.

p < .05.

Hypothesis 9. With the ninth hypothesis, an attempt was made to demonstrate that there is a direct relationship between how principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements identified in the top five positions on the ranking and on the log. Symbolically, this may be shown as follows:

\[ H_0 : \rho = 0 \]
\[ H_a : \rho > 0 \]

The correlation in this hypothesis is represented by the Pearson Product-Moment Correlation Coefficient describing the relationship between the ranking and the log for all members of the
sample. The Pearson $r$ is equal to $-1918$, with a probability of $0.209$.

**Hypothesis 10.** In the 10th hypothesis, the researcher attempted to demonstrate that there is a difference between new principals (n) and experienced principals (e) in the correlation between how they perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements in the top five positions on the ranking and the log. Symbolically, this may be represented as follows:

- $H_0$: $\rho_n = \rho_e$
- $H_a$: $\rho_n \neq \rho_e$

The Pearson $r$ between the ranking and the log for the new principals is $-0.3651 (p = .150)$ and for the experienced principals it is $0.0000 (p = .500)$.

**Hypothesis 11.** With the 11th hypothesis, an attempt was made to demonstrate that the correlation between how principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements in the top five positions on the ranking and the log, is higher for female principals (f) than for male principals (m). This may be stated symbolically as follows:

- $H_0$: $\rho_f = \rho_m$
- $H_a$: $\rho_f > \rho_m$
The Pearson $r$ between the ranking and the log for female principals is $-0.1601$ ($p = 0.329$), and this correlation for male principals is $-0.1930$ ($p = 0.297$).

**Hypothesis 12.** An attempt was made with the 12th hypothesis to demonstrate that the correlation between how principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements in the top five positions on the ranking and the log, is higher for self-confident principals (c) than for less self-confident principals (lc). Symbolically, this may be shown as follows:

- $H_0: \rho_c = \rho_{lc}$
- $H_a: \rho_c > \rho_{lc}$

The correlation between the ranking and the log for self-confident principals is $0.2774$ ($p = 0.191$), and for less self-confident principals it is $-0.2740$ ($p = 0.256$).

**Hypothesis 13.** With the 13th hypothesis, an attempt was made to demonstrate that the correlation between how principals perceive that they should spend their time and how they actually do spend their time, as indicated by the number of effectiveness-related statements in the top five positions on the ranking and the log, is higher for principals with an effective leader style (s) than for principals with less effective leader styles (ls). This may be shown symbolically as follows:
\[ H_0: \rho_s = \rho_{ls} \]
\[ H_a: \rho_s > \rho_{ls} \]

The Pearson \( r \) between the ranking and the log for principals with an effective leader style cannot be computed because of the linear nature of the Pearson \( r \), which does not permit computation of samples having two cases (Hinkle et al., 1979, p. 84). (There were two principals identified as having an effective leader style.) The correlation for the group of principals with less effective leader styles is \(-.1667 (p = .254)\).

Hypothesis 14. With the 14th hypothesis, the researcher attempted to demonstrate that there is a relationship between the ranking of elementary principals and the ranking of their supervisors regarding the priority of activities associated with the principalship. Symbolically, this may be represented as follows:

\[ H_0: \rho = 0 \]
\[ H_a: \rho \neq 0 \]

The correlation coefficient in this hypothesis represents the relationship between the ranking of the principals and the ranking of their supervisors. It is equal to \(.0422\), with a probability of \(.430\).

Hypothesis 15. In the 15th hypothesis, an attempt was made to demonstrate that there is a relationship between the ranking of elementary principals and their teachers regarding the priority of activities associated with the principalship. This may be shown symbolically as follows:
\[ H_0: \rho = 0 \]
\[ H_a: \rho \neq 0 \]

In this case the correlation coefficient represents the relationship between the ranking of the principals and the ranking of their teachers. This is equal to \(-0.4337\), with a probability of \(0.028\).

Interpretation

Examination of the Findings

A specific explanation regarding each hypothesis is here considered. The outcome, with supporting information, is addressed. The conclusion regarding the findings is then stated.

Hypothesis 1. The first hypothesis compared the mean scores of new and experienced principals on the ranking, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis stated that there would be a difference in the means of the two groups. The ANOVA indicated an \(F\)-ratio of 1.8. The critical value for \(F\) at \(\alpha = 0.05\) with 1, 18 degrees of freedom is 4.41 (Hinkle et al., 1979, p. 470). The observed value of the test statistic (1.8) is less than the critical value (4.41); therefore, the null hypothesis is retained. The probability that the observed score could have occurred by chance if, in fact, the null hypothesis is true, is 0.1964. No difference could be found in the ranking of perceived importance of job activities between new
principals and experienced principals.

Hypothesis 2. This hypothesis compared the mean scores of female principals and male principals on the ranking, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis indicated that the mean for the women principals would be greater. The ANOVA revealed an \( F \)-ratio of .184. The critical value for \( F \) at \( \alpha = .05 \) with 1, 18 degrees of freedom is 4.41. The observed value of the test statistic (.184) is less than the critical value (4.41); therefore, no difference could be found between the means of these two groups, and the null hypothesis is retained. The probability that the observed score could have occurred by chance is .3367 with a one-tailed test. There is no evidence to indicate that the mean score on the ranking was greater for female principals.

Hypothesis 3. With the third hypothesis a comparison was made between self-confident principals and less self-confident principals regarding the mean scores on the ranking, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis stated that the mean for the self-confident principals would be greater. Since the mean standard score on the self-confidence scale of the ACL was 60 for the subjects in this study, each participant who received 60 or higher was considered self-confident. The use of this criterion placed 12 principals in the self-confident category and eight in the less self-confident range. The \( F \)-ratio on the ANOVA for these two groups was 5.76. The
The observed value of the test statistic (5.76) is larger than the critical value (4.41), and the probability that the observed score could have occurred by chance is .0137 with a one-tailed test. A difference was found between these two groups, but the difference was not in the direction which had been predicted. Instead, it showed that the less self-confident principals had a higher mean score on the ranking than did those having greater self-confidence. Therefore, the null hypothesis must be retained.

**Hypothesis 4.** The fourth hypothesis compared principals with an effective leader style and those with less effective leader styles with regard to mean scores on the ranking, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis indicated that principals with an effective leader style would attain a higher score. Two subjects were classified as having an effective leader style (9,9), according to the Styles of Management Inventory. The other 18 revealed less effective leader styles on this instrument, with five subjects scoring 1,1 (minimal concern for production and for people). The ANOVA indicated an $F$-ratio of 1.8 for the two groups. The critical value for $F$ at $\alpha .05$ with 1, 18 degrees of freedom is 4.41. The observed value of the test statistic (1.8) is less than the critical value (4.41); therefore, no difference was found in the mean scores on the ranking between principals with an effective leader style and those with less effective leader styles. The probability that the
observed score could have occurred by chance is .0982 with a one-tailed test. The null hypothesis was retained, and no support was demonstrated to indicate that principals with an effective leader style would score higher on the ranking. However, since the group of principals assessed as having an effective leader style was very small, it is difficult to develop a definitive interpretation.

**Hypothesis 5.** In the fifth hypothesis, a comparison was made between the mean scores of new principals and experienced principals on the log, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis stated that there would be a difference in the means of the two groups. The $F$-ratio on the ANOVA was .027. The critical value for $F$ at $\alpha = .05$ with 1, 18 degrees of freedom is 4.41. Since the observed value of the test statistic (.027) is less than the critical value (4.41), the null hypothesis is retained. The probability that the observed score could have occurred by chance is .8705. The study did not reveal a difference in the scores on the log of activities between new principals and experienced principals.

**Hypothesis 6.** This hypothesis compared the mean scores of female principals and male principals on the log of activities, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis indicated that the mean for the women principals would be greater. An $F$-ratio of .71 was shown on the ANOVA. The critical value for $F$ at $\alpha = .05$ with 1, 18 degrees of freedom is 4.41. The observed value of the test
The statistic (.71) is less than the critical value (4.41); thus, no difference was found between the means of these two groups, and the null hypothesis must be retained. The probability that the observed score could have occurred by chance is .2053 with a one-tailed test. There is no evidence to show that the mean score on the log was greater for women principals.

Hypothesis 7. With the seventh hypothesis a comparison was made between self-confident principals and less self-confident principals with regards to the mean scores on the log of activities, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis stated that the score for self-confident principals would be higher. The ANOVA revealed an F-ratio of 4.069. The critical value for F at α .05 with 1, 18 degrees of freedom is 4.41. The observed value of the test statistic (4.069) is less than the critical value (4.41); therefore, no difference was established between the means of these two groups, and the null hypothesis is retained. The probability that the observed score could have occurred by chance is .0294 with a one-tailed test, but on the basis of the test statistic, support cannot be claimed for the statement that the mean score on the log would be higher for self-confident principals. It should, however, be noted that the observed value and critical value for the test statistic are similar and that the difference in the means for the two groups is in the direction hypothesized.
Hypothesis 8. This hypothesis compared principals with an effective leader style and those who have less effective leader styles with regard to the mean scores on the log of activities, as indicated by the number of effectiveness-related responses in the top five positions. The operational hypothesis indicated that the score would be greater for those principals demonstrating an effective leader style. The $F$-ratio on the ANOVA was .249. The critical value for $F$ at $\alpha = .05$ with 1, 18 degrees of freedom is 4.41. The observed value of the test statistic (.249) is less than the critical value (4.41); thus, no difference was shown between the means of these two groups, and the null hypothesis is retained. The probability that the observed score could have occurred by chance is .3119 with a one-tailed test. No support was found to indicate that the mean score of the log would be higher for principals with an effective leader style.

Hypothesis 9. The ninth hypothesis presented a comparison between all scores on the ranking and all scores on the log, as indicated by the number of effectiveness-related statements in the top five positions. The operational hypothesis stated that there would be a direct relationship between the scores on the two instruments. The correlation coefficient, or Pearson $r$, between these two sets of scores was found to be -.1918. This represents a slightly negative relationship, which is opposite of the hypothesized outcome. The null hypothesis is, therefore, retained. The critical value of the correlation coefficient for 18 ($n - 2$) degrees of
freedom at $\alpha .05$ for a one-tailed test is .378 (Hinkle et al., 1979, p. 474). The value of the Pearson $r$ (-.1918) is less than the critical value for the correlation coefficient (.378); thus, retention of the null hypothesis is supported. The probability (.209) that the observed statistic would have occurred by chance if, in fact, the null hypothesis is true, is greater than .05. When the value of the test statistic is computed, it is found that $r = -.829$. The critical values for $r$ for 18 degrees of freedom at $\alpha .05$ is ±1.734. Since the value of the test statistic (-.829) is less than the critical values (±1.734), the null hypothesis is retained (Hinkle et al, 1979, pp. 181-183; 466). No evidence could be found indicating that there was a direct relationship between the principals' responses on the ranking and the log of activities.

**Hypothesis 10.** In the 10th hypothesis a comparison was made between new principals and experienced principals with regards to the correlation of the ranking and the log, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis indicated that there would be a difference between the two correlations. The Pearson $r$ for the ranking and the log for new principals was -.3651, and this correlation for experienced principals was .0000. This seems to indicate that there was a difference, with a slightly negative correlation for the new principals and no correlation at all for experienced principals. However, the extent of the difference between the two correlation figures must be determined. Subtraction gives an $r$ value of -.3651.
The Fisher's log transformation is used in the computation. With this transformation, the difference between the two scores is found to have a $z_r$ value of $-0.383$. The test statistic, $z$, is equal to $-0.7166$. The critical values of the test statistic at $\alpha = 0.05$ for a two-tailed test is $\pm 1.960$. The observed value of the test statistic ($-0.7166$) does not exceed the critical values ($\pm 1.960$); therefore, the null hypothesis is retained (Hinkle et al., 1979, pp. 223-225; 466; 473). No evidence was found indicating that there was a difference in the correlations of the ranking and the log for new principals and experienced principals.

Hypothesis 11. This hypothesis showed the comparison between female principals and male principals as regards the correlation of the ranking and the log, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis stated that this correlation would be higher for female principals. The correlation coefficient between the ranking and the log for women principals was $-0.1601$, and this correlation for the men was $-0.1930$. Both of these figures represent a very small, negative correlation, with the correlation for the male principals showing a slightly more inverse relationship. The degree of the difference between the two correlations must be determined. An $r$ value of $0.0329$ is obtained by subtraction. Using the transformation to a $z_r$ value, the difference is $0.034$. The test statistic, $z$, is equal to $0.0636$. The critical values for the test statistic at $\alpha = 0.05$ for a one-tailed test is $\pm 1.645$. The observed value of the test
statistic (.0636) is less than the critical values (±1.645); thus, the null hypothesis is retained (Hinkle et al., 1979, pp. 223-225; 466; 473). No support could be found indicating that the correlation of the ranking and the log was higher for female principals than male principals.

Hypothesis 12. With the 12th hypothesis, a comparison was made between self-confident principals and less self-confident principals with regards to the correlation of the ranking and the log, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis indicated that the correlation would be higher for self-confident principals. The Pearson $r$ for the ranking and log for self-confident principals was .2774, and this figure for the less self-confident principals was -.2740. This appears to show a difference, with a somewhat positive correlation for self-confident principals and a somewhat negative correlation for less self-confident principals. However, it is necessary to perform the calculations to determine the extent of the difference. Subtraction provides an $r$ value of .5514. In transforming this figure to a $z_r$, the difference is .566. The test statistic, $z$, is equal to 1.0148. The critical values for the test statistic at $\alpha .05$ for a one-tailed test is ±1.645. Since the observed value of the test statistic (1.0148) is less than the critical values (±1.645), the null hypothesis is retained (Hinkle et al., 1979, pp. 223-225; 466; 473). No evidence was found indicating that the correlation of the ranking and the log was higher for self-confident
principals than for less self-confident principals. It should be noted, however, that the findings are in the direction hypothesized.

**Hypothesis 13.** With this hypothesis an attempt was made to compare principals who have an effective leader style and those with less effective leader styles as regards the correlation for the ranking and the log, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis indicates that the correlation for principals having an effective leader style would be larger. The correlation for the sample of two principals with an effective leader style could not, however, be computed. Since there was no way to compare correlation coefficients, this hypothesis could not be tested.

**Hypothesis 14.** Hypothesis 14 provided a comparison between principals and their supervisors with regards to the scores on the ranking, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis stated that there would be a relationship between the scores for these two groups. The Pearson \( r \) for these two sets of scores was found to be .0422. This represents a very small positive relationship. The critical value of the correlation coefficient for 18 \((n - 2)\) degrees of freedom at \( \alpha = .05 \) for a two-tailed test is .444 (Hinkle et al., 1979, p. 474). The value of the Pearson \( r (.0422) \) is less than the critical value for the correlation coefficient (.444); thus, retention of the null hypothesis is supported. The probability (.430) that the observed statistic would have occurred by chance is greater than .05.
than .05. When the value of the test statistic is computed, it is found that \( r = .1792 \). The critical values for \( t \) for 18 degrees of freedom at \( \alpha = .05 \) is \( \pm 2.101 \). Since the value of the test statistic (.1792) is less than the critical values (\( \pm 2.101 \)), the null hypothesis is retained (Hinkle et al., 1979, pp. 181-183; 466). No evidence could be found indicating that there was a relationship between the ranking of the principals and that of their supervisors.

**Hypothesis 15.** This hypothesis compared principals and their teachers with regards to the scores on the ranking, as shown by the number of effectiveness-related statements in the top five positions. The operational hypothesis indicated that there would be a relationship between these scores. The correlation coefficient for these two sets of scores was found to be \( -0.4337 \). This represents an inverse relationship. The critical value of the correlation coefficient for 18 \( (n - 2) \) degrees of freedom at \( \alpha = .05 \) for a two-tailed test is \( .444 \) (Hinkle et al., 1979, p. 474). The value of the Pearson \( r \) (-.4337) is less than the critical value for the correlation coefficient (.444); therefore, the null hypothesis is retained. Computing the value for the test statistic reveals that \( r \) has a value of \( -2.042 \). The critical values for \( t \) for 18 degrees of freedom at \( \alpha = .05 \) for a two-tailed test is \( \pm 2.101 \). The value of the test statistic (-2.042) is less than the critical values (\( \pm 2.101 \)); thus, the null hypothesis is retained (Hinkle et al., 1979, pp. 181-183; 466). No support was found to indicate that there was a relationship between the ranking of the principals and the ranking of their teachers.
teachers. The size of the negative correlation in the findings for this hypothesis is, however, worth noting since it is quite close to the critical value. Also, a probability of .028 was indicated.

**Annotation**

The results presented in this study are not in the direction predicted. Differences between the groups relevant to the hypotheses tested could not be found. This, of course, does not indicate that there actually are no differences, but merely that evidence of possible difference was not revealed with the procedures that were used.

Speculation as to factors that may have affected the outcome is a valuable exercise. There are a number of circumstances which could have contributed to the nature and direction of the findings. Some of these considerations are as follow:

1. The sample in this study is relatively small, having a total of 20 subjects, with five individuals in each of four subgroups.

2. The subjects may have been a homogeneous group, associated with a conservative, midwestern area and working in districts of small to moderate size.

3. Either knowingly or unknowingly, some participants may have responded to the survey instruments with answers they believed would be considered "best" or "right," but not necessarily a reflection of their real attitudes and behavior. (This may be particularly relevant in this study because of possible pressure stemming from the
fact that the researcher is a colleague from the same area.)

4. Although 100% of the subjects responded in all areas, some may have been reluctant to devote the time and effort necessary to provide complete, accurate data relevant to all instruments.

5. Perhaps there are additional factors or variables not considered in the current study, but associated with individuals, which impact upon effectiveness.

6. The division of the subgroups as to the number of years in the principalship may not have been as relevant to effectiveness as some other possible division.

7. Possibly, there are characteristics and factors associated with the organization that may have an influence upon effectiveness but were not specifically addressed in this study.

Collateral Data

There was a considerable amount of data collected throughout the course of this study. Some of the information pertinent to the project, but not specifically discussed in connection with the various hypotheses which were tested, is presented here. Such information provides additional insight into the role of the principal.

Background data gathered from the principals revealed several relevant facts. The majority of the principals (13 out of 20) indicated that they had had from 4 to 9 years of teaching experience before becoming a principal. Half of the principals stated that their highest degree earned was a master's degree. Five have additional course work beyond the master's level, and five hold specialist's
degrees. Most of these principals (11 out of 20) had an enrollment between 250 and 400 in their buildings. Two of them had an enrollment under 250, and three had over 700 students in their schools.

One of the most obvious facts revealed in the study was that principals, in general, appeared to have a clear understanding regarding those areas of activity most closely associated with effectiveness. Their priorities—the ways in which they would prefer to utilize their time—are closely aligned with activities stressed in the literature dealing with effectiveness. All of the principals participating in this survey received a score of four or five on the ranking, indicating that they had placed this number of effectiveness-related statements in the top five positions. Therefore, the indication is that these principals appear to be aware of what they should be doing and how they should be spending their time, as relates to their job activities.

On the ranking, principals cited instructional-related activities (Item 5) as the top priority associated with their job. Seventeen of the 20 participants placed instructional-related activities in the top position. One subject gave the first position to staff planning (Item 2), one gave it to student achievement (Item 6), and one gave the top position to communication (Item 7). None of the female principals selected an item other than instruction as the top priority. The log of activities, however, revealed quite a different account. Instructional-related activities (Item 5) received a fifth position, according to the frequency count of participation in various activities. Communication (Item 7) received three times
more marks indicating participation than did instruction. Direct supervision of students (Item 1) was in second position, paperwork (Item 8) was third, and attending to the learning environment (Item 9) was fourth.

When asked what hindrances might keep them from doing all that they believe they should be doing as a principal, the participants' most frequent responses were discipline, interruptions, and the ongoing daily activities of the school--described by one principal as "the realities of the world, the realities of the job and task." Another principal explained, "Your schedule is in the hands of others." Also mentioned frequently as hindering their priorities were paperwork, collateral duties, meetings, and parental contacts.

The ranking by the superintendents or supervisors regarding the priority of activities they perceived in the buildings under consideration cited instructional-related activities (Item 5) as the top priority within these schools. On nine of the responses from superintendents this item was placed first. Direct supervision of students (Item 1) and student achievement (Item 6) each received three first-position rankings. Communication (Item 7) was ranked first on two of these responses. Meetings (Item 3), discipline (Item 4), and paperwork (Item 8) each received one first-place ranking. The greatest discrepancy between the principals' ranking and the superintendents' ranking appeared to have occurred in the subgroup of women who are experienced principals.

On the teachers' survey of the priorities they perceived in their building, communication (Item 7) was well ahead of the other
items in the number of first-place rankings received. Discipline (Item 4) was second highest, followed by direct supervision of students (Item 1). Instructional-related activities (Item 5) was in the eighth position when all the first-place rankings were tallied. Only staff planning (Item 2) and fund raising (Item 10) were lower.

There would appear to be a certain degree of conflict, then, in the role of the principal. This is illustrated in the comparison of their ranking of priorities with their log and with the teachers' ranking. It seems that principals are cognizant of the things they should be doing in relationship to their role. However, these activities are not necessarily the ones which receive the preponderance of their time, attention, and energy.

Summary

This chapter has delineated the analysis of the data pertinent to the study. The techniques that were employed were outlined, and the results concerning the 15 hypotheses were detailed. The findings did not show support for the operational hypotheses; rather, the results appeared to be in the opposite direction from what had been predicted. There was no evidence indicating a difference in either the priorities concerning job activities associated with the principalship or in the extent of participation in those activities between new principals and experienced principals, female principals and male principals, self-confident principals and those with less self-confidence, or principals who have an effective leader style and those with less effective leader styles. Also, no support was
found indicating that the relationship between the ranking of priorities and the log of participation was different within any of these pairs of subgroups. Further, no relationship was evident between the ranking of the principals and that of their superintendents or between the ranking of the principals and the ranking of their teachers. The findings did reveal, however, that, according to the ranking, the elementary principals who participated in this survey appear to be well aware of the activities that should receive their highest priority, as relating to principal effectiveness. Also, it was shown that the self-confident principals seem to display a greater degree of relationship between the ranking and the log than any of the other groups, indicating that their actual behavior more closely approximates the activities they believe they should be doing.

Factors which may have contributed to the outcome were cited. Among these considerations were the sample size and the apparent homogeneous makeup of the group. Other information relating to the principals and their role which had been gathered during the survey was presented also. Notable among these findings is the fact that principals ranked instructional activities as the most important aspect of their job from among 10 areas of activity; however, their log indicating how they actually spent their time placed instruction in the fifth position out of the 10 areas. Such findings—together with the comments made by some principals—may indicate the presence of a certain degree of role conflict.
CHAPTER V

SUMMARY AND CONCLUSIONS

Summary of the Study

This study has sought to increase understanding as relates to the elementary principalship. The report addresses the extent to which elementary principals espouse and practice job activities which are related to principal effectiveness. The importance of the role of the elementary principal in the American educational system was discussed. It is to the individual in this role that children, parents, teachers, central administrators, and members of the community turn to make the educational program work successfully and the schools function smoothly. Yet, there are indications that the role of the elementary principal has not been clearly defined.

In recent years the subject of school effectiveness has become a popular topic, both in the educational realm and in the media. Further, school effectiveness is closely linked to the effectiveness of the principal. In the current investigation an attempt was made to identify some factors which may be associated with principal effectiveness. These factors included length of time in the principalship, gender, level of self-confidence, and leader style.

Literature pertinent to the topics under consideration was discussed, and the lack of empirical studies in many of these areas was indicated. Reading, synthesizing information, and searching for the
interrelatedness of the material became one of the tasks of the investigation. Fifteen hypotheses were developed, based on a study of the literature. Primarily, these hypotheses were designed to demonstrate that there are differences in the perceptions of principals regarding the priorities of their role and in the way they utilize their time, based upon their length of service in the position, gender, level of self-confidence, and leader style. The areas of job activities utilized in determining how the principals believe that they should spend their time and how they actually do spend their time were based mainly upon what is written in the literature regarding effective principals and their activities.

The design of the study was then presented. A stratified random sampling plan was developed to identify 20 elementary principals in Berrien County, Michigan. The subjects were placed in four subgroups relating to length of service as a principal and gender. An interview of each subject was conducted. In this survey, four instruments were used to gather data. A ranking of job activities determined the subjects' priorities, and a log indicated the actual participation in the various activities. The Adjective Check List was used to determine the level of self-confidence of the subjects, and the Styles of Management Inventory was used to indicate leader style. The superintendent of each of the principals and the teachers in each building also completed the ranking instrument, indicating their perceptions.

A discussion of the results of the study followed. The data analysis did not indicate support for the hypotheses. No differences
were evident regarding either the priorities or the participation in activities between the subgroups of elementary principals—new and experienced, male and female, self-confident and less self-confident, and those with an effective leader style and ones with less effective leader styles. Also, differences in the relationship between the priorities and actual participation were not found for these pairs of subgroups. Thus, the findings were in the opposite direction from what had been hypothesized. Some factors possibly affecting the results were cited, such as small sample size. Then, other relevant information gathered in the course of the investigation, relating to principals and their role, was discussed.

Application

Recently, much attention has been focused upon the quality of education in this nation and specifically upon the effectiveness of educators and educational programs. Indeed, the improvement of education has become a national goal. Understanding the factors related to effectiveness is the first step to increasing the effectiveness of this nation's educational institutions.

There will always be considerable creativity, diversity, and flexibility for the individuals who are most directly responsible for the educational programs and the operation of schools. However, as the factors within the individual and within the organization that account for effectiveness are identified and clarified, then will follow the development of the success model, or "effectiveness model," for principals. Such a model, well-grounded in research,
will be a substantial contribution to universities that train individuals for the position, school districts that hire and nurture candidates for the position, and the principals who live it.

Recommendations for Future Studies

The present study gives rise to questions suggesting the need for continued research into the role and activities of elementary school principals, particularly in relationship to their effectiveness. The recommendations for future investigation fall within five categories. The first one concerns the population and sample. It would be edifying to conduct a similar study with a larger sample selected from various localities across the country. Also, educators in private schools might be a part of such future research. Research of this type would yield results with a high degree of generalizability.

The second area of recommendations addresses the method of data collection. A study utilizing the log of activities for several days at various times throughout the school year would be advisable. One suggestion might involve the subjects recording their activities on the log for 4 days at the beginning of the school year, 4 during the middle of the year, and 4 toward the end of the year. Another technique might require that subjects be randomly assigned various weeks and/or months throughout the school year during which time they would note their activities. Also, a study incorporating a work-sampling technique in conjunction with the log would be enlightening. Such methods could provide a rather thorough overview
of principals' activities throughout the year.

The third area for future study focuses upon organizational characteristics associated with effectiveness. While there remains a need to continue the identification of characteristics, traits, and behavior of individuals which are associated with effectiveness, there is an equally compelling need to recognize the characteristics of the organization or institution which may be important factors in the effectiveness of that organization or institution.

The next recommendation broadens the scope of investigation to include other disciplines. It may be possible to discover whether factors associated with effectiveness are, indeed, multidisciplinary. Research is the key to determining if factors comparable to those associated with effective individuals and organizations within the educational field may be present in other fields, such as industry, health services, business, military, and law enforcement.

The fifth and final recommendation highlights the multicultural aspects of the present topic. It is necessary to go beyond the cultural confines of the United States in order to determine whether there are certain factors associated with effectiveness, both within individuals and organizations, that are present in other cultures. Such an investigation could determine if the factors and characteristics ascribed to an effective principal in Michigan, for instance, are similar to the factors and characteristics ascribed to an effective head-master in England, as an example.

Thus, it is apparent that the possibilities for future research in the area under consideration are numerous and varied. The topic
certainly is apropos, and the results can be far reaching. The current study serves as an invitation to other enthusiastic researchers.

Conclusions

During the course of this survey a wealth of information has been gathered, particularly relating to the 20 elementary principals who were the subjects of the study. Important among the findings is the perception that the subjects indicated regarding the priority of role-related activities associated with effectiveness. These principals do, in fact, recognize the activities with which they should be most concerned, but in reality their behavior does not appear to coincide with their priorities. Further, the relationship between the ranking of priorities and the log of activities revealed that self-confident principals are more likely than the other groups to engage in those activities they believe to be important.

Many questions have been asked, and the results of this investigation indicate that many more questions need to be raised if the role of the elementary principal is to be more fully understood. Through continued investigation those serving in the principalship will be benefited. However, the children in our schools will reap the true rewards in a better education and a richer life. This, then, is the ultimate goal of all educational research.

The present study indicates that the area of school and principal effectiveness must be pursued. Much is yet to be learned, and the learning must be applied. Educators today stand at the
beginning of an epoch of growth. The outcry has been heard regarding the state of the nation's schools, and educators must be prepared to face the challenge with insight and inspiration.

This study demonstrates that there are exciting things to be explored and learned, not only in the field of education, but also in all the behavioral sciences. As long as human beings are the subjects with their marvelous potential for behavior and unending—and often unpredictable—activity, questions and possibilities will never be exhausted, and the thirst for knowledge and understanding will never be quenched.
CHAPTER VI

THEORY OF EFFECTIVENESS

The State of the Knowledge

At the present time, it appears that no attempt has been made to consolidate material related to effectiveness into an organized body of thought. The theory presented here is needed in order to clarify and give meaning to the accumulation of data and writing concerning this subject. Without adequate definition and a framework to guide in the development of the ideas and concepts which exist, the previous investigations and the future findings will not be as readily understood or as useful as they could be. The current document is an indication that a need has been recognized and that at least one voice is speaking to that need. This document purports only to be the starting point—the beginning—of the theory of effectiveness.

The Plan

In the development of the theory of effectiveness, certain concepts closely related to the subject required exploration. First, it seemed appropriate that if a theory is to be initiated, the concept of theory needed to be addressed. Then, since the primary interest is relating to effectiveness as it occurs within given organizations or institutions, an understanding of social systems
appeared to be essential. Next, since effectiveness is a term often associated with leaders and their behavior within particular social systems, the concept of leadership became appropriate. Finally, this led to the consideration of the concept of effectiveness. Such, then, is the outline—the plan—for the discussion that follows.

The Development of the Theory

Considerations Regarding Theory

It becomes important to understand something of the meaning and nature of theory if the development of this or any theory is to proceed. According to Kerlinger (1973) "A theory is a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena" (p. 9). Borg and Gall (1979) stated that "In simple terms a theory is an explanation of behavioral or physical events" (p. 50). They further explained that theories consist of generalizations, or laws, and constructs. Boles (1980) emphasized the aspect of completeness as relates to the concept of theory when he wrote, "Theory is the most complete explanation of a phenomenon available" (p. 9). He then proceeded to indicate that the explanation, or theory, may be either normative (philosophical or prescriptive) or descriptive (scientific) in nature (p. 9). At this point this aspect of the nature of theory will be explored.
Descriptive theory. A descriptive (scientific) theory describes what is.

A descriptive, or scientific, theory is the most complete explanation of a phenomenon available, in the most objective terms possible. Thus, if one's thinking and values permit explanation of the leadership phenomenon in objective terms, based on empirical observation, then his theory is descriptive. (Boles, 1980, p. 9)

Such a definition would undoubtedly be applicable in areas other than leadership, the area specifically cited. It is not possible, however, to have a truly descriptive, scientific theory in the social sciences in the same way that such theories prevail in the physical sciences. Human beings are far too complex, and there are far too many variables in any social system to precisely determine all the cause and effect relationships which are in existence at any one time.

Ary, Jacobs, and Razavieh (1972) described the problem as follows:

In spite of the use of the scientific method and the accumulation of a large quantity of reliable knowledge, education and the other social sciences have not attained the scientific status typical of the natural sciences. The social sciences have not been able to establish generalizations equivalent to the theories of the natural sciences in scope of explanatory power or in capacity to yield precise predictions. Frequently there is lack of agreement among researchers in the social sciences as to what the established facts are or what explanations are satisfactory for the assumed facts. Perhaps the social sciences will never realize the objectives of science as completely as the natural sciences. Certainly it must be stressed that the use of the scientific method is not in itself a sufficient condition for scientific achievement. (p. 18)

Several limitations related to the application of the scientific approach in education and the other social sciences were
presented by Ary et al. (1972, pp. 18-20). That discussion is summarized as follows:

1. The complexity of the subject matter is a major obstacle. In the natural sciences most phenomena are explained with a limited number of variables which can be measured precisely. Such clear-cut explanations are not attainable in the social sciences, which deal with human subjects. In this domain many variables must be considered, and each individual's unique development and behavior must be taken into account.

2. Difficulties in observation present another limitation. Observations in the social sciences—such as education, and leadership per se—rely upon interpretation by the observer; and that interpretation is affected by the attitudes, values, and motives of the observer. Such observations are, therefore, subjective in nature.

3. Another area of difficulty is replication. It is impossible to duplicate exactly the events of a social phenomenon.

4. Interaction of observer and subjects is another obstacle. When individuals are being observed, the responses may not be an accurate representation of actual performance.

5. Also, difficulty in control presents a problem. Controls utilized in scientific research are not applicable to research in the social sciences.

6. Measurement problems are yet another limitation. Instruments needed to measure and analyze complex social science phenomena are not available.
Halpin (1966) addressed the dilemma regarding descriptive theory most aptly. He explained that analytical theory is good, but many people feel uncomfortable with it because something is missing. It is "too rational, too tidy, too aseptic" (p. 284).

**Normative theory.** A normative theory describes what "should be." "A normative theory is the most complete explanation of a phenomenon available, in ideal terms. If one's thinking and values dictate explanation of the leadership phenomenon in terms of what 'should be,' then his theory is normative" (Boles, 1980, p. 9).

This definition would certainly apply in other areas as well. The theory presented for consideration in this study is normative in nature. The writer views this as the most realistic, workable, useful approach to understanding a given phenomenon, such as effectiveness.

Boles (1981, pp. 4-5) suggested that those who develop theory should be concerned about usefulness for the practitioner and researcher. In explaining his rationale for acceptance of a normative theory, Haviland (1981) stated, "The most valuable theory is one that allows a degree of projection, advising or suggesting what techniques are necessary in order to be an effective leader" (p. 1).

Another factor relevant to the selection of a normative theory is the awareness that norms, or standards, exist everywhere. At a very early age individuals begin to learn what is acceptable within their particular culture. Most individuals are taught to view various areas of life in terms of "good" or "bad," "right" or "wrong,"
"should," "ought," and "best." It is extremely difficult to draw comparisons without using these value-laden terms. Even in the social sciences, such as education, criteria are developed by which to view and evaluate various theories. The reality of such criteria is evidence of the fact that norms have been established and that comparisons and judgments are made. Thereby, it is feasible to speak of a certain theory as being "better" than some other theory. It is clear, then, that one's own value system encroaches upon the theories he or she explores and develops. No theory regarding human behavior is completely value free (Boles, 1980, p. 9).

**Extensive theory.** What is proposed here for reflection is a way of eliminating the ongoing argument between those who believe that theory must be totally descriptive—relate only to what in actuality is observed—and those who believe that theory must have an evaluative dimension, so to speak, and prescribe the most successful course to pursue. The resolution is found very simply in a merger of these two concepts into what is here called the extensive theory. Extensive it is because this framework holds fast to the need for empirical evidence in describing the real world, but then it extends the knowledge so gathered to formulate guidelines for action and improvement. A theory must, indeed, be rooted in observable data; however, if the theory stops with just these descriptions, it is incomplete. The fullness of the theory is realized when it is put into operation and leads to progress and growth.
Considerations Regarding Social Systems

Getzels and Guba (cited in Sergiovanni & Starratt, 1979) have done much to further the understanding of behavior within social systems. The model they developed is shown in Figure 2. According to their concept, as discussed by Sergiovanni and Starratt (1979, pp. 63-65), the social system consists of two interdependent, interacting dimensions: the institution and the individual. Institutions have roles and role expectations geared to the achievement of institutional goals; whereas, individuals have personality and need disposition geared toward the achievement of individual goals.

Behavior, then in any social system is a function of the interaction between unique personalities and preestablished roles. Conformity to the institution, its roles, and its expectations leads to organizational effectiveness, while conformity to individuals, their personalities, and their need dispositions leads to individual efficiency. (Sergiovanni & Starratt, 1979, p. 65)

ORGANIZATIONAL (NOMOTHEtic) DIMENSION


Figure 2

General Model Showing the Organizational and Personal Dimensions of Social Behavior
These two dimensions, the institution and the individual, interact because of a shared goal. This is the nature of social systems. The paradigm and model presented by Boles (1980, pp. 31-34) describe the four basic goals of any social system: satisfaction of wants of system members, innovation, productivity, and maintenance of the system. Boles (1980) wrote, "A social system is any group of persons who share a goal and who interact so that actions of one affect the actions or reactions of others" (p. 266). A social system, however, does not exist in isolation. A realistic assessment of the concept helps one to readily understand that "an individual functions in a role within a social system which, in itself, functions within a larger social system" (Boles, 1980, p. 21).

In relating the concept of social systems specifically to educational institutions, Boles and Davenport (1975) explained:

Every agency of the educational institution carries out its functions through a social system which is structured around a unity of purpose and an interdependence of its core elements—people. Those people operate within certain constraints on the organization—some of which are self-imposed and some imposed from without.

Every system has inputs, a process, and outputs. If the process is to be changed ... there must be feedback to the system. At all points, expectations for everyone in the organization are operative and they come from people, power structures, physical conditions, legal arrangements, financial needs and resources, "what is," and professionalism. (p. 31)

Thus, as a result of internal and external forces, the institution and the individual interact in a particular manner, causing certain observable behaviors. Both the model of Getzels and Guba (see Figure 2) and the one adapted by Boles (see Figure 1) conclude
with the identification of observable behavior. This gives rise to speculation that if behavior is a result of the interaction of the individual and the institution, then effective behavior must be a result of a specific interaction of the individual with the institution—taking into account the goals, needs, and characteristics of both. The question then arises: Is it possible to expand the models which have been previously discussed to deal with effective observable behavior?

Considerations Regarding Leadership

Leadership is an appropriate topic for the present discussion because it is a phenomenon which occurs within social systems and because it is closely associated with the subject of effectiveness. These topics are frequently related, particularly within the educational domain. The reason for this can be found in the underlying purpose of educational leadership. Sergiovanni and Starratt (1979) wrote, "Ultimately the purpose of supervision is to enhance educational programs and institutional effectiveness in the school" (p. 40). Regarding school effectiveness, Felsenthal (1982) concluded that "strong leadership appears to be the most crucial factor" (p. 11).

The theory of leadership which one seeks, develops, and espouses offers guidance and direction in every area of the individual’s performance, establishes the foundation for leading, and provides the vantage point from which to view the entire phenomenon of leadership.
Leadership is a sophisticated concept, and there are many different definitions of leadership. There is, however, similarity reflected in the various definitions so that a classification of definitions may be developed (Stogdill, 1974, p. 7). In reviewing the work of various scholars, Stogdill (1974, pp. 7-16) developed the following classification scheme. It coalesces definitions according to those who view leadership as:

1. A focus of group processes.
2. Personality and its effects.
3. The art of inducing compliance.
4. The exercise of influence.
5. Act or behavior.
6. A form of persuasion.
7. A power relation.
8. An instrument of goal achievement.
9. An effect of interaction.
10. A differentiated role.
11. The initiation of structure.

Problems related to the definition of leadership are not new. Tannenbaum, Weschler, and Massarik (1961, p. 22) explained that there is considerable disagreement as to the meaning of the word leadership although the word is widely used. They indicated the need for a careful statement of a frame of reference and the development of a basic, systematic theory.

The work of Boles (1980) has focused upon this need. The precise definitions of the terms leader, leading, and leadership have
clarified the concept. These definitions are as follow:

**Leader.** A leader is a person who is recognized by one or more others as exerting—either short- or long-term—influence, authority, or power in a given situation.

**Leading.** Leading is a series of actions in which an individual is perceived by one or more others as exerting influence, authority, or power in a situation.

**Leadership.** Leadership is a process, or series of actions, in which one or more persons exert influence, authority, or power over one or more others in moving a social system toward one or more of four primary system goals. (pp. 16-17)

The definitions cited are in accord with the thoughts that are basic to the current presentation. It is, of course, true that not all "leaders" are effective. The theory being submitted for consideration indicates that it is possible—not only possible, but essential—to identify factors associated with effectiveness and, thereby, to enhance the leadership process.

**Considerations Regarding Effectiveness**

**Definition.** One of the first steps necessary in the development of a theory is to define terms so that there can be mutual understanding among those concerned with or discussing the subject. If there is to be a theory of effectiveness, the premise must be accepted that the term **effectiveness** can be defined. It is not some mysterious, illusive term defying research and reason. The writer submits the following definition of **effectiveness**: the extent to which those qualities or characteristics are present which enhance the performance and attitudes of individuals while facilitating the
productivity and well-being of the organization. This definition is stated in general terms so that it may be applied within various disciplines.

**Generalizations.** The first generalization dealing with effectiveness is that effectiveness can be observed and measured. Within each discipline, the definition of the term can be operationalized to include the specific results, behaviors, characteristics, and measurements needed to assess effectiveness in that area. Within industry, for example, the essence of the nature of effectiveness will differ from that in education, or health services, or law enforcement. However, within each of these disciplines—and others—effectiveness can be defined, observed, and measured. While it is quite true that present measurement techniques within the social sciences, or behavioral sciences, are probably less than adequate to completely assess effectiveness, it should be remembered that all the possibilities have not been explored and that this area is ripe for development.

The second generality follows naturally from the preceding dialogue. It states simply that if effectiveness can be analyzed as indicated, it can also be controlled, predicted, facilitated, and enhanced. Within individuals and organizations growth in effectiveness is possible. This becomes increasingly feasible as knowledge and research regarding effectiveness are organized and expanded. Thus, it is apparent that the definition and measurement of effectiveness find their greatest application in their ability to advise
and project techniques and characteristics necessary for effectiveness in a given area. This theory, therefore, becomes highly workable and practical. It is action oriented. The theory gives particular consideration to people and to their development, and its ultimate goal, or purpose, is in serving others.

The third generality relates to the major areas addressed in the theory. These areas are the individual with his/her needs, characteristics, traits, and performance and the organization with its goals, characteristics, roles, and productivity in terms of output or results. Herein is the coming together of social systems theory and leadership theory.

The fourth generalization draws attention to the relationships dealt with in this theory. These relationships exist between the individual and his/her performance, between the organization and its resulting productivity, and between the individual and the organization in interaction as relates to performance. These relationships must be addressed as part of a total picture. Uniquely, in light of this theory they are viewed in terms of the positive end result.

Model. The model for the theory of effectiveness is shown in Figure 3. It is an attempt to illustrate or explain effective observable behavior. The model shows that individuals and organizations interact within a social system which, in turn, operates within a larger social system. The individual and the organization have mutually inclusive, supportive goals. This forms the basis for the interaction. In the process of attaining the goals, the needs,
Figure 3
Model for the Theory of Effectiveness
expectations, activities, and characteristics of the individual interact with the requirements, roles, tasks, and structure of the organization. Specifically, these will differ with various individuals and organizations. It is the interaction of the "right" combination of these attributable factors that leads to effective behavior. The results of the effective behavior, as seen in the performance of the individual and the production of the organization, are mutually satisfying. Feedback to the individual and to the organization is important in facilitating the functioning of this entire process; particularly the development of the individual, the growth of the organization, and the continuation of effective behavior.

Paradigm. The paradigm, simply stated, is presented in the following description. Effectiveness, as an observable and measurable phenomenon, occurs within the context of a social system. Various factors, characteristics, needs, and relationships within the organization and within the individual are identified; and the interaction between the organization and the individual is described. These are attributable to the resulting behavior. By understanding these factors and affecting them appropriately, the likelihood of attaining positive responses can be increased. Thus, the success with which the goals of the system and of individual system members are achieved and the factors associated with achievement of the goals are delineated.
Relationship to the present investigation. The theory of effectiveness is the foundation upon which the present study was built. It is known that the performance of some elementary principals and the production, or achievement, in their schools tend to surpass that of their colleagues in other schools. That is, some principals appear to be more effective than others. The investigator attempted to determine some factors that might contribute to this difference. For purposes of this study, the principals' effectiveness was demonstrated by the way in which they prioritized their job activities and by their actual participation in specific activities, as suggested in the current literature on effectiveness. Their supervisors' and teachers' perceptions regarding the principals' activities were also taken into consideration.

Regarding effectiveness, it was assumed that the differences are related to some observable behavior. Therefore, some factors which may be associated with principals' behavior were examined. These included the level of self-confidence, which is directly related to the needs of the individual; role perception regarding priorities, which is directly related to the individual's expectations; the extent of participation in various job-related activities; and length of service in the position, gender, and leader style, which are characteristics of the individual. These are but a few of the many aspects regarding the individual which could be considered. This investigation addressed only the individual aspects associated with effective behavior. The organizational considerations have been delegated to future studies.
The Synopsis

A perusal of current writings, particularly in education, seems to indicate that the topic of effectiveness will be a vital subject for some time to come. There can be little doubt that this concept touches the lives of everyone, regardless of station in life or area of endeavor. In the preceding discussion the term effectiveness has been defined; and its interrelatedness and dependence upon the concepts associated with theory, social systems, and leadership have been outlined. The model for the theory of effectiveness has been presented and explained, and its relationship to the current study has been discussed. Although this presentation is but the foundation of the theory, it stresses the importance of organizing the present body of knowledge and thought into a systematic, useful framework. If this dialogue has succeeded in elevating the level of awareness of even one individual, then it has, indeed, accomplished its purpose.

There may be those who believe that emphasis on effectiveness offers a somewhat idealistic approach to situations in a very real world. No apology is offered—or needed—for the idealism in the underlying theme which emphasizes the potential for change and growth within every individual and within every organization. A basic belief in the motives and the capabilities of human beings, individually and collectively, is rightly woven throughout the theory of effectiveness.
Appendix A

Letter to District Superintendents
1747 Trafalgar
St. Joseph, Michigan 49085
May 18, 1983

Dear

I am a doctoral student at Western Michigan University and am working on my dissertation. I am writing to you regarding some assistance with my project.

My dissertation focuses upon the activities associated with the elementary principalship and the way in which principals utilize their time. I have selected a stratified random sample of twenty (20) elementary principals in Berrien County whom I hope to interview. The principal in your district who has been drawn as part of the sample is indicated below:

If I may have your permission to conduct this survey in your district, I will arrange an interview with this principal during which the following instruments will be utilized:

1. The Adjective Check List, which assesses self-confidence.
2. Styles of Management Inventory, which identifies leader styles plotted on Blake and Mouton's managerial grid.
3. A ranking entitled Activities of the Elementary Principal, which assesses principals' priorities regarding job activities.
4. The Log of Activities to determine how principals actually do spend their time over a typical two-day period.

I am also requesting that you or the immediate supervisor of the principal—if it is another individual—complete the brief ranking instrument. Then, too, I would like to have the teachers who work with the principal which has been identified complete the same ranking.

COPY
May 18, 1983
Page 2

Please be assured that all data will be treated in a confidential
manner and that the identification of your district will not appear
in any reports of this project. Certainly, your district will
incur no expense associated with the study. Upon completion of the
study, I will gladly provide you with a copy of the report.

I am sure that I need not explain to you the importance of the role
that principals have in the educational system. Research regarding
these leaders can have a far-reaching effect on the lives of young
people. However, such research is very limited. Will you please
help me find out more about these key men and women in education and
the activities they perform?

Enclosed you will find a self-addressed, stamped envelope. I will
be most pleased to hear from you and to share with you additional
information regarding this study and the instruments which will be
used. Should you wish to call me concerning the project, my tele-
phone number at work is (616) 925-1179, and my number at home is
(616) 429-5126.

Your attention and interest are deeply appreciated.

Sincerely,

Judy Johansen
Appendix B

Supervisor's Ranking of Activities
of the Principal
Please read the following statements. Then rank them in order (1-10) according to the extent that you believe each activity occurs in _________________________ school. (The statement with highest priority should receive a "1.")

_ DIRECT SUPERVISION OF STUDENTS
  Lunchroom supervision
  Bus supervision
  Playground duty
  Hall supervision
  Classroom supervision

_ STAFF PLANNING
  Sharing ideas
  Sharing work

_ MEETINGS
  Attending meetings
  Conducting/planning meetings

_ DISCIPLINE

_ INSTRUCTIONAL-RELATED ACTIVITIES
  Planning for instruction
  Observing in classrooms
  Participating in classrooms
  Establishing goals
  Evaluating instruction
  Studying research and other educational material

_ STUDENT ACHIEVEMENT
  Developing and expressing expectations
  Monitoring progress
  Planning for assessment
  Informing parents of progress

_ COMMUNICATIONS
  Communicating with staff
  Communicating with students
  Communicating with parents
  Communicating with central administration
  Communicating with other principals
  Communicating with community groups

_ PAPERWORK
  Preparing forms
  Preparing reports
  Attending to correspondence
  Preparing for meetings

_ LEARNING ENVIRONMENT
  Attending to facility
  Keeping budget
  Ordering materials
  Walking about building

_ FUND-RAISING PROJECTS
Appendix C

Letter of Acknowledgment to District Superintendents
I wish to extend my appreciation to you for allowing me the opportunity to come into your district in connection with my research project. Your assistance and input have been most beneficial. I am certain that information gathered through interviewing principals in your district will enhance my study.

Sincerely,

HAVE A HAPPY DAY!
Appendix D

Letter to Principals
Dear

Please allow me the opportunity to seek your assistance and input. I am a student doing research at Western Michigan University, and I am primarily interested in various aspects of the elementary principalship. My current project focuses upon the activities associated with the elementary principalship and the way in which principals utilize their time. Research regarding school principals has been very limited. Will you please help me find out more about these key men and women in education?

You may be confident that your responses will be treated in a confidential manner and that the name of your school district will not appear in any reports of this project. Also, rest assured that I have made the proper contacts with your Superintendent and have received consent regarding your participation in this survey.

I will be calling you shortly to discuss this project with you and to set up an appointment at your convenience. I realize that this is a very busy time of year for you; however, your kindness in sharing your time, your interest, and your expertise will be deeply appreciated.

Sincerely,

Judy Johansen
Appendix E

Interview Schedule
INTRODUCTION

Purpose
Confidentiality
Subjects commitment

BACKGROUND

Number of years of teaching experience
Highest degree earned
Number of students in the school

ADJECTIVE CHECK LIST

STYLES OF MANAGEMENT INVENTORY

ACTIVITIES OF THE ELEMENTARY PRINCIPAL (RANKING)

OPEN-ENDED QUESTION:

What hindrances might keep you from doing all that you believe you should be doing as a principal?

LOG OF ACTIVITIES

INTERVIEWER'S COMMENTS
Appendix F

Ranking of Activities
ACTIVITIES OF THE ELEMENTARY PRINCIPAL

Participants will be given 10 index cards, each containing a statement. They will be asked to place them in order according to the way they believe elementary principals should spend their time. (The first card in the ordering indicates highest priority. Cards will not be numbered.)

Card 1: DIRECT SUPERVISION OF STUDENTS
- Lunchroom supervision
- Bus supervision
- Playground duty
- Hall supervision
- Classroom supervision

Card 2: STAFF PLANNING
- Sharing ideas
- Sharing work

Card 3: MEETINGS
- Attending meetings
- Conducting/planning meetings

Card 4: DISCIPLINE

Card 5: INSTRUCTIONAL-RELATED ACTIVITIES
- Planning for instruction
- Observing in classrooms
- Participating in classrooms
- Establishing goals
- Evaluating instruction
- Studying research and other educational material

Card 6: STUDENT ACHIEVEMENT
- Developing and expressing expectations
- Monitoring progress
- Planning for assessment
- Informing parents of progress

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Card 7: COMMUNICATIONS

Communicating with staff
Communicating with students
Communicating with parents
Communicating with central administration
Communicating with other principals
Communicating with community groups

Card 8: PAPERWORK

Preparing forms
Preparing reports
Attending to correspondence
Preparing for meetings

Card 9: LEARNING ENVIRONMENT

Attending to facility
Keeping budget
Ordering materials
Walking about building

Card 10: FUND-RAISING PROJECTS
Appendix G

Log of Activities
LOG OF ACTIVITIES

On this log, please record your activities for _______________.

Indicate with a check mark (or marks) in the proper column the activity (or activities) which best describes how you spent your time during each half-hour period of the day.

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Appendix H

Letter to Teachers
Dear Teacher:

Please allow me the opportunity to seek your assistance and input. I am a student doing research at Western Michigan University, and I am primarily interested in various aspects of the elementary principalship. My current project focuses upon the job activities of principals.

I am sure you realize that elementary principals have an important role in the educational system and that learning more about their activities will benefit staff as well as students.

I have met with your principal and interviewed him/her regarding the role of the principal. Now I would like to have your perceptions. Please be assured that I have received consent from your principal regarding your participation in this survey and that your response will be confidential.

Accompanying this letter you will find a ranking entitled Activities of the Elementary Principal. You are asked to indicate the order of importance of the 10 statements as demonstrated by your principal. I am interested in determining the extent to which you see these activities occurring in your building. This can be completed in a very short time. Then you may return your response to me in the envelope which has been provided.

I realize that this is a very busy time of year for you. However, your contribution to this study and your kindness in sharing your time and interest will be deeply appreciated.

Sincerely,

Judy Johansen
Appendix I

Teachers' Ranking of Activities of the Principal
Please read the following statements. Then rank them in order (1-10) according to the extent that you believe each activity occurs in your school. (The statement with highest priority should receive a "1.")

--- DIRECT SUPERVISION OF STUDENTS
- Lunchroom supervision
- Bus supervision
- Playground duty
- Hall supervision
- Classroom supervision

--- STAFF PLANNING
- Sharing ideas
- Sharing work

--- MEETINGS
- Attending meetings
- Conducting/planning meetings

--- DISCIPLINE

--- INSTRUCTIONAL-RELATED ACTIVITIES
- Planning for instruction
- Observing in classrooms
- Participating in classrooms
- Establishing goals
- Evaluating instruction
- Studying research and other educational material

--- STUDENT ACHIEVEMENT
- Developing and expressing expectations
- Monitoring progress
- Planning for assessment
- Informing parents of progress

--- COMMUNICATIONS
- Communicating with staff
- Communicating with students
- Communicating with parents
- Communicating with central administration
- Communicating with other principals
- Communicating with community groups

--- PAPERWORK
- Preparing forms
- Preparing reports
- Attending to correspondence
- Preparing for meetings

--- LEARNING ENVIRONMENT
- Attending to facility
- Keeping budget
- Ordering materials
- Walking about building

--- FUND-RAISING PROJECTS
Appendix J

Letter of Appreciation to Principals
Please accept my sincere appreciation for your participation in my research project. Your input is a valuable asset to my study, and your courtesy will long be remembered. It is a pleasure to have met such responsive, enlightened colleagues.

Sincerely,

HAVE A HAPPY DAY!
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