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An Investigation of Selected Characteristics of Elementary Principals and Their Relationship to Teacher Education

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AN INVESTIGATION OF SELECTED CHARACTERISTICS OF ELEMENTARY PRINCIPALS AND THEIR RELATIONSHIP TO TEACHER EDUCATION

by

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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Introduction

The effectiveness of school administrators in achieving stated long range educational goals has been investigated by numerous researchers over the past three decades. In these attempts efforts have been made to define effectiveness in a variety of ways, such as character traits of the administrator, group perceptions, role expectations, and organizational models. It appears that while significant findings have been reported, leading to a greater understanding of the administrative process, these attempts have failed to specifically address the aspect of teacher-principal cooperation. This void in the literature, which could very well contribute significantly to the level of administrator effectiveness, is the primary concern of this study.

Addressing this concern directly, the present chapter provides the foundation for the study through the inclusion of a statement of the problem, a justification of its need, a review of the related literature, the major purposes, definitions of terms to be utilized, the scope and limitations of the study, and a summary.

The Problem

The terms used to define school administrator effectiveness and variables employed to measure it are of concern to both the academicians, who develop theory and train administrators, and school officials in the field, who accept the responsibility for hiring administrators

to supervise the educational processes and programs in individual school buildings. This concern is exemplified by the vast number of reported research efforts devoted to the delineation and measurement of the concept of administrator effectiveness.

These attempts have incorporated a wide range of criteria and frames of reference for measuring administrator effectiveness. While each approached the measurement in a different manner, such as through character traits of the administrator, factors of the group or situation involved, internal attitudes of leaders and followers, or organizational forces influencing leader behavior, there appeared to be a general agreement that administrator effectiveness implied the attainment of some specified level of goal achievement.

This level of attainment for educational goals in individual school buildings may be dependent on a number of factors, such as parental and community support, facilities, school environment, materials, and operating capital. However, while such factors may contribute significantly, they must be considered secondary to the contributions made by the professional staff of the organization. The extent of such contributions toward goal achievement could be determined by the quality and nature of the working relationships existing between the principal and his staff.

While various relationships exist, such as personal, social, organizational, formal, informal, or combinations of all of these, of primary interest in this study are those which serve to determine the level of cooperation between the building principal and his teaching staff. The quality and nature of these relationships might well be

the determinants of the ease with which a principal could initiate programs, develop procedures, assign tasks, and provide for the day-to-day operations in striving for stated long-range goals.

As Likert (1967, p. 149) has stated:

> If bickering, distrust, and irreconcilable conflict become greater, the human enterprise is worth less; if the capacity to use differences constructively and engage in cooperative teamwork improves, the human organization is a more valuable asset.

The existence of a supportive and cooperative staff alone may not insure goal achievement; however, building principals are likely to desire these dimensions due to the fact that they may allow for a tension-reduced atmosphere so that energies might be directed toward goal attainment rather than dissipated through confrontation.

It is also likely that while administrators may be desirous of supportive and cooperative staffs there will be those who are successful in developing and maintaining these characteristics and those who are not. It is the intent of this study to see if these differences can be discerned and if variables descriptive of the building principal, the teaching staff, and the community can be identified as being associated with the different levels. Of primary concern is the delineation of theoretical and operational definitions of teacher cooperation and the development of an instrument to measure the concept. These will be treated in Chapter II.

Justification

Researchers over the past forty years have attempted to substantiate relationships between administrative behavior, style, and attitudes and the effectiveness of the organization, the types of

inter-personal relationships contributing to goal attainment, and the overall atmosphere, or climate, within the organization. Research reported by Courtis (1938), Barnard (1938), Halpin (1956), Hemphill, Griffiths, and Frederickson (1962), Halpin and Crofts (1962), Wiles (1963), Likert (1967) and Williams (1971) tends to support the existence of such relationships and point to the fact that the leader of an organization plays a significant role in influencing its total operation and productivity.

A review of the efforts cited revealed some significant relationships between various aspects of leaders and those of their respective organizations; however, only the work of Courtis (1938) dealt directly with the concept of employee cooperation. The study of the influences of the leader on the organizational climate by Halpin and Crofts (1962) provided some similarity to the problem under study; however, the factors derived from an analysis of their data produced nothing that resembled the concept of cooperation. Further review, through an ERIC search and examination of the Pyschological Abstracts back to the year 1934, produced no evidence of research reported on this concept. It therefore becomes apparent that researchers, for one reason or another, have avoided or abandoned efforts to relate aspects of administrator behavior, style, or attitudes with levels of employee cooperation.

It seems, however, that in light of the diametric positions developing between school administrators and teachers, stimulated and nourished by the collective bargaining process, and forecasts by Toffler (1974), Shane (1973), and Amara (1974) of the need for greater teamwork in the educational community, the concept of the administrator's

role in developing and maintaining employee cooperation warrants consideration.

Results of such a study could provide new information in the field of administrator-employee interpersonal relations, and serve as the basis for further investigation. The finding of significant relationships could also provide a new dimension for the training of or inservice for building principals and make available an instrument for determining levels of teacher cooperation. The need for such a study becomes apparent in the review of research, which is presented in the following section.

Review of Research

The purpose of this section is to provide the framework for the development of the theory and rationale relating the principal's behavior to teacher cooperation. To achieve this objective the section is presented in six sub-sections, including: (1) the role of the principal, (2) perceptions of behavior, (3) influences on the organizational climate, (4) definitions of cooperation, (5) types of cooperative behavior, and (6) nature of and influences on cooperation.

The role of the principal

The building principal, as a supervisor, manager, and leader, appears to be the keystone in the determination and maintenance of the level of attainment of the institution's goals and organizational "climate." While other variables may provide significant influence on these, the principal, through his skills, knowledge and abilities, or lack of, seems to contribute the major influence. Researchers have

provided supportive evidence for this by reporting the existence of relationships between administrative behavior, attitudes, and style, and the "effectiveness" of the organization, the types of inter-personal relationships contributing to goal attainment, and the overall atmosphere, or climate, within the organization.

Courtis (1938), in writing on the functions of the leader, cited three primary responsibilities: (1) to coordinate, (2) to direct, and (3) to encourage. He maintained that as long as the faith in the leader was sustained, the group would work together to achieve common goals. If, however, events proved the leader incompetent in these primary responsibilities or mistaken in his perceptions or decisions, he predicted that membership in the group would fall away.

In dealing directly with leadership practices and organizational productivity, Kahn and Katz (1960) identified three supervisory variables related to increased organizational productivity. They were reported as: (1) the supervisor's ability to play a role different from his supervisees, (2) the degree of closeness of supervision, possibly a trust factor, and (3) the quality of employee-orientation. The latter was described as referring to a supportive personal relationship with the employee feeling that the supervisor was taking a personal interest in him.

Halpin (1956), in studying the leadership behavior of school superintendents, reported that those considered "most effective" ranked high on two factors which had been named "Initiating Structure" and "Consideration." He described the former as relating to the establishment of clear patterns of organization, lines of communication, and

definitive role and procedure expectations. The latter concerned behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of the staff.

In their study of building principals and organizational climate, Halpin and Croft (1962, p. 10) reported that "An essential determinant of a school's 'effectiveness' as an organization is the principal's ability -- or lack of ability -- to create a 'climate' in which he and other group members can initiate and consummate acts of leadership." In doing so they have suggested a progression linking the principal with the organizational "climate" which in turn is a determinant of the organizational "effectiveness."

Hemphill, Griffiths and Frederickson (1962) studied the administrative styles of 232 elementary school principals and concluded that the most "able" and well-regarded were those who worked at organizing preparations for making decisions, sought considerable data to determine fact from opinion, and solicited the viewpoints of others. While "most able" leaves considerable latitude as to exactly what the term connotes, it does suggest an inference to the principal's technical competence and what others have termed "effectiveness." The last element of the conclusion focuses on the supervisor-employee relationship which has surfaced in each of the other studies cited.

The purpose of this section was to provide some evidence in support of the assumption that building principals play a central role in determining the "effectiveness" of the organization, or the degree of successful attainment of organizational goals, and the "climate" existing within the organization. The studies reported tend to support

this contention and suggest that the effectiveness of the organization is related to the "climate" which exists. Each of the researchers cited utilized the perceptions of others, i.e., employee groups, immediate supervisors, boards of control, etc., in determining "effectiveness" and "climate" before relating them to variables associated with the supervisor. The significance and validity of these perceptions are treated in the following section.

Perceptions of behavior

The perception of how well a person performs his assigned duties appears to be dependent on who appraises the performance and the particular role in the organization they maintain. The research indicates that while an individual may perceive himself as fulfilling the expectations of a particular position in the organizational hierarchy, the measure of satisfactory performance rests with those that perceive him from levels above and below in the organizational structure, and their particular experiences and points of view.

Costello and Zalkind (1963) describe perceptions as being a result of how one sees something or someone else through the viewer's own eyes. What is seen is interpreted in terms of the viewer's background, understandings, skills, opinions, attitudes, behavior, prejudices, interests, fears, and satisfactions. Booker (1974) maintained that, in addition to these individual characteristics of the perceiver, the position of responsibility in the organizational heirarchy determined the nature of the perception.

Evidence to support this latter position was provided by Costello and Zalkind (1963) through their study of self-perception in individuals

at different levels within an organization. In studying the self-descriptions of various populations at different levels within the hierarchy, they were able to report that the differences resulted from the varying degree of responsibility of the position.

In studying teachers' descriptions of their principals, Charters (1962) found that the variance within the descriptions was more closely associated with the variance in elements within the perceivers rather than the variance in the behavior of the principals. This finding is in agreement with that proposed by Costello and Zalkind relative to characteristics of the perceiver.

In a similar effort, Hansen (1971) utilized the twenty-three item Administrator Image Questionnaire (AIQ) of the Western Michigan University Educator Feedback Center to examine the similarity of perceptions of administrators by employee groups and administrator self-perceptions. Utilizing 362 school administrators, representing various levels of organizational structure, he found no significant relationship between the ratings of the administrators and their employee groups. Bootsma (1972) utilized a modified version of the AIQ in an industrial setting and reported findings similar to those preceding.

Likert (1967, p. 48) provided the significance of these studies by stating that "The subordinates' perception of the situation, rather than the supervisors', determines whether or not the experience is supportive." In a work situation then, the perception of the employee group will determine the level of supportiveness that exists in attempting to achieve organizational goals.

The research cited has indicated that the perception of a situation or performance of an individual varies with the position of responsibility and personal background and experience of the viewer. While this perception may not be the same as that held by the supervisor, or as accurate, it does determine the attitudes and behaviors of the larger group from which productivity and supportive relationships emerge. It is these perceptions, whether accurate or inaccurate, which serve as the determinants of the "climate" existing in an organization.

Influences on the organizational climate

The purpose of this section was to present research findings which have shown the relationship between personal characteristics of supervisors and the psychological environments that exist within their organizational structures. Considered here were morale, compliance and militancy.

In attempting to relate types of organizational climate to leadership traits, Halpin and Croft (1962) utilized teacher perceptions of their principals and the environments in which they worked. Through a factor analytic process the eighty-two items on the Organizational Climate Description Questionnaire were factored into eight factors. Four appeared to deal directly with the principal and the remaining four with the psychological work environment. In the analysis of the results, six distinct climates were identified along with their associated leadership behaviors.

The climate which had the most significant "morale" score was associated with a leadership style that was supportive of the staff,

open to suggestions, involved staff participation in decision-making, provided fair treatment in dealing with individual staff members, and was "authentic." The researchers noted that while they were able to determine a representative score for morale, it certainly was not unidimensional in nature.

In a separate study, Koplyay and Mathis (1967) administered the Halpin and Croft OCDQ instrument and the Chandler and Mathis Morale Survey in an attempt to validate the OCDQ. The findings reported substantiated those reported by Halpin and Croft.

Similarly, Williams (1972, p. 87) in a study conducted at Harvard, found that a principal's Executive Professional Leadership rating correlated with teacher morale and teacher performance. He concluded that "As the principal strives to improve teacher job satisfaction, he should concern himself with the 'openness' of the climate." He also found that the "open" climate was accompanied by a significant level of esprit and that the closed climate produced little satisfaction in respect to achievement of tasks or meeting social needs.

In addition, he reported that the sex and marital status of the principal were not significantly related to the EPL rating, and that the size of the city and the principal's salary have little influence on it. Independent of these ratings he reported that younger teachers tended to be more dogmatic and that as the number of years of experience increased the level of job satisfaction increased.

A study of personality factors of elementary school principals and how they related to interpersonal perception and morale was conducted by Edgecombe (1968). It was concluded that no significant relationship

between a principal's personality and faculty morale existed. In addition, it was concluded that the principal's perception of interpersonal needs was significantly related to teacher ratings of the principal's "emotional stability," "shrewdness," and "confidence."

Wiles (1963) suggested in his theory of supervision that the behavior of the principal directly influenced the morale level and general atmosphere in the building by how he provided for a feeling of job security, supportiveness of staff decision, involvement of subordinates in the decision-making process, how open he was, how well he communicated with the staff, and if he was concerned about the staff's welfare. He predicted that the principal who was open and concerned, who communicated well, and who involved his subordinates in the decision-making process would attain a significant level of morale, cooperation, and efficiency and effectiveness in achieving institutional goals.

In an examination of teacher perceptions of supervisors, Saunders (1969) reported that there was a high concern for better interpersonal relationships between supervisors and teachers in such areas as giving teachers respect, providing for individual differences, and promoting friendly faculty relationships. It was concluded that the findings supported the theory that teachers favored a supervisor who was considerate and was concerned about the teachers' welfare. Pfiffner (1969) found similar results in an industrial setting, however, with a special emphasis on communication. While these latter two studies indicate employee preference for supervisors, they do not imply that a supervisor with the stated characteristics, behaviors or attitudes will necessarily gain the full support of his subordinates or that they will willingly comply with his requests.

Research regarding the influences motivating individuals to comply with requests was found in the field of social psychology. Hollander and Wiesenthal (1969), in studying the effects of a monetary reward on compliance, stated that social exchange theory predicted greater compliance when a reward was given. Their work substantiated this by showing greater compliance with requests when an expected monetary reward was provided. Failure to consistently provide the expected rewards resulted in a decrease in the compliance of the individuals.

Rewards, however, do not have to be monetary. Maslow (1969), in his theory of motivation, stated that rewards could be those satisfiers of human needs which provided for the advancement through a hierarchy of needs to a "self-actualizing" level. These needs, once beyond those required for basic human survival, included love, affection, acceptance, esteem, and etc. He theorized that individuals were motivated toward action because of the intangible rewards which could be provided by others to fulfill these human needs.

In support of this position, Regan (1968) reported that the level of compliance with requests was increased when a favor was provided by the individual making the request. He concluded that the favor stimulated compliance because it created feelings of obligation on the recipient which could be eliminated by reciprocating the favor. In a broad sense, the term favor could also include the supplying of intangible rewards as suggested by Maslow.

Compliance and willing compliance with requests appear to be different phenomena and occur for entirely different reasons. The research reviewed, however, did not provide insight into this difference.

Another aspect of teacher behavior which could provide an influence on the psychological atmosphere is the militancy of the staff. The review uncovered a few efforts attempting to link militancy with leader behavior. In studying teacher militancy, Keely, Greg, and Keely (1973) concluded that teacher militancy was not a unitary phenomena and that there was an obvious distinction between action and attitude. While they were unsuccessful in reporting a significant relationship between militancy and leadership style, they did find that the best predictors of militant attitudes were political and economic factors. When these were deleted, sex became the best predictor with the number of males on a teaching staff directly related to the militancy level reported by their instrument.

In parallel studies, Cauldwell and Spaulding (1973), and Lutz and McDaniel (1973) examined principals' rule administration styles at the high school and elementary levels, attempting to show a relationship between autocratic administrative styles and teacher militancy. The results, however, proved negative. While they were able to distinguish between styles, they were unable to gain significant differences in the militancy scale they utilized. The former study did report, however, a significant degree of militancy in men and younger teachers.

The intent of this section was to demonstrate that the organizational climate could be influenced by the actions and attitudes of the supervisor. The research presented tends to show that the person exercising supervisory authority does in fact do this, with the exception of the employee militancy factor. Having provided such evidence, the focus of the review was turned to the primary concern of the study -- that of "cooperation."

Definitions of cooperation

The establishment of a theoretical and operational definition of the term "cooperation" was of primary importance in the study. The review, however, uncovered relatively few theoretical definitions, and no operational definitions of "cooperation." Sources located were divided into two categories and are as follows.

Webster (1970, p. 184) defined "cooperation" simply as being the "process of acting or working with another or others." In similar fashion Melchior (1950, p. 16) defined it as "any 'working together' by human beings, whether results are achieved voluntarily or involuntarily." It is important to note that the preceding refer to the "working together" without regard to whether the action was a willing act. This was in contrast to the definitions that follow.

"Vertical Cooperation" was defined by Good (1973, p. 138) as "Agreeable, helpful relationships beyond those actually required by the tasks at hand among persons of different ranks in industry or in any hierarchical organization."

A "cooperative system" was explained by Barnard (1938) as being a group of persons some or all of whose activities are coordinated and held together by a common purpose as well as by the willingness of certain people to contribute to the operation of the organization. Similarly, Eye, et al. (1971, p. 124) suggested that "cooperative people are those who have accepted a common goal and set about achieving it through contributing their own specific and unique talents, abilities and skills to the achievement of that goal."

The latter three definitions contained elements pertaining to a definite willingness of the participants to work together. This implied something quite different than the two considered previously. The selection of which type to utilize in the study was treated in the following chapter.

Types of cooperation

The review of the literature uncovered two attempts at classifying types of cooperative behavior between employees and supervisors. The first described cooperation as being either "authoritarian," "controlled," or "voluntary," and the second, a more extensive treatment, presented eight distinct categories.

The first treatment presented here was by Harris (1963). In writing on supervisory behavior, he delineated three basic types of cooperation -- authoritarian, controlled, and voluntary. He characterized "authoritarian cooperation" as an employee compliance with the requests of the supervisor by virtue of the position of authority held. He described it as "basically a master-slave concept of human relations. The master, or the leader, commands and the workers, or the followers, cooperate by carrying out the instructions." (p. 269)

"Controlled cooperation," in principle, found little fundamental difference from that of authoritarian cooperation, Harris concluded. "In both types the leaders decide what they want done" (Harris, 1963, p. 270). The manner in which they achieved the desired results provided the difference between the two. In this particular type, the leader was described as employing group decision-making procedures, allowing

for input from employees in the hope of securing identification with and support for the decisions, yet employing subtle measures to insure that group decisions were in accordance to pre-determined outcomes.

Harris, an advocate of "democratic" decision-making, favored "voluntary cooperation." This was characterized as a willing contribution of talents and efforts to carrying out decisions reached by democratic decision-making processes. It was his contention that "willing" or "voluntary" acts of cooperation emanated from individuals believing they had played a major role in the decisions which were made.

Courtis (1938) conducted a two-year study of the principles and practices of cooperation which resulted in a delineation of eight distinct types of cooperation and a listing of them in order of their probable evolutionary development. Table 1 (Melchior, 1960, p. 16) summarizes the types, the motivation of the individual to cooperate, and the influences on the total organization as a result of the given conditions.

Examination of both presentations provided strong support for the position that various types of cooperation existed and that there were a variety of motivations to stimulate cooperative behavior. A suggestion of the relationship between leader behavior and group cooperation was made and provided the impetus to examine the body of research for further reported influences on the cooperative atmosphere.

Nature and influences on cooperation

While the literature regarding the nature of and influences on cooperation was not extensive, a few studies, conducted over the past forty years, did provide an indication of the relationships existing

Table 1

Levels and Types of Cooperation

Level and Type	Motivating Desire	Effect on employees within the organization
Reaction	None; mechanistic action only	None
Involuntary	Individual achievement	None, because agent and effect are too widely separated to be recognized as related
Impulsive	Satisfaction in expression	Varied, depending on nature of impulse
Individualistic		
a. Division of work	Immediate achievement	Satisfaction, friendship
b. Combination of forces	Immediate achievement	Satisfaction, friendship
Assistance		
a. Bargaining	Mutual benefit	Personal satisfaction in achievement, friendship, growth, social consciousness
b. Exploitation	Selfish benefit	Indignation, contempt, revenge
c. Compromise	Necessity	Impatience, resentment contempt
d. Compulsion	Selfish benefit or desire to control others for their supposed benefit	Fear, hatred, revenge
e. Good will	Sympathy for others	Friendship, affection
Competency	Need for expert assistance	Gratitude, respect, affection
Leadership	Individual and social progress	Respect, honor, devotion
Democratic	Unity with complete self-expression through the group and group welfare	Creative growth, social sensitivity, joy, security love

with specific variables and an insight into their roles as determinants. Topics selected for inclusion here were identified as social factors, persistence, the leader's role, styles of leadership, values, creativity, conflict, trust, risk, and capital.

Social factors. In writing on the functions of the executive, Barnard (1938) proposed, as a basic element in his theory of administration, that the determining factors of cooperation were physical and biological in nature. If the influences of these factors permitted the existance of a cooperative situation, then social factors would be essential to secure it. From this viewpoint he considered cooperation as being "the process synthesizing in action three quite different orders of factors" (Barnard, 1938, p. 265).

It was Barnard's contention that the level of cooperation was a social aspect of the total situation and that other social factors would arise from it. The importance of this aspect he maintained, was that these social factors would in turn become the limiting factors of the situation. If this position is accepted, it becomes apparent that the cooperative nature of the work group is dependent upon a complex array of social variables, and that the development and maintenance of a cooperative situation is complicated by an interdependence of initial and resulting social factors. He concluded that if all three factors, physical, biological, and social, would permit, the leader would secure cooperation through the use of incentives and persuasion.

Persistence. The persistence of cooperation in an organizational setting was dependent on two conditions, according to Barnard (1938): (1) its effectiveness, and (2) its efficiency. He distinguished between the two, and suggested implications for the executive in the following manner.

> Effectiveness related to the accomplishment of the cooperative purpose, which is social and nonpersonal in character. Efficiency related to the satisfaction of individual motives, and is personal in character. The test of effectiveness is the accomplishment of a common purpose or purposes; effectiveness can be measured. The test of efficiency is the eliciting of sufficient individual wills to cooperate.
>
> The survival of cooperation, therefore, depends upon two interrelated and interdependent classes of processes: (a) those which relate to the system of cooperation as a whole in relation to the environment, and (b) those which relate to the creation or distribution of satisfactions among individuals.
>
> The instability and failures of cooperation arise from defects in each of these classes and processes separately, and from defects in their combination. The functions of the executive are those of securing the effective adaptation of these processes (Barnard, 1938, p. 147).

This passage suggests that the effectiveness of cooperation is the same as the effectiveness of the leader, or the organization, as was defined by Boles (1969) and Getzels, Lipham and Campbell (1968). It implied that for cooperation to persist the organization must fulfill the expectations held for it, as viewed by those providing the cooperative effort.

The determinant efficiency appears to rely upon the nature of the interpersonal relationships existing between the supervisor and the employees. The implication is that what the former does in attempting to provide suitable personal satisfiers, and how these actions are

perceived by the latter group will serve to determine the efficiency of the cooperative effort.

The leader's role. The preceding sections gave an indication of the fundamental role the leader must assume in the development of cooperative relationships. Specific variables descriptive of leader behavior related to the cooperative level within organizations, however, were not found in the review conducted. Reported here are the conclusions of Barnard (1938) and Likert (1967).

The former concluded that:

> The strategic factor in cooperation generally is leadership, which is the name for relatively high personal capacity for both technological attainments and moral complexity, combined with propensity for consistency in performance to moral factors of the individual (Barnard, 1938, p. 288).

The point made being that the level of cooperation within an organization was dependent upon the quality of the leadership provided. Those leaders possessing the attributes described as comprising leadership, would generally be found to have cooperative employees.

Being more specific, Likert (1967) stated that the extent to which each individual would respond with cooperative behavior focused on achieving organizational goals and was dependent upon the supportive and ego-building relationships existing between superior and subordinate. The implied responsibility for these rested with the superior.

While neither of these statements provided conclusive evidence for the existence of a relationship between leader behavior and cooperation level, there was a strong suggestion that the leader played a definite role in the latter's determination. Failure to uncover

further support for this position resulted in an examination of leadership styles, treated in the following section.

Styles of leadership. Researchers have tended to conclude that cooperation between individuals within an organization results when a "democratic," or "participative" form of leadership, or management style is employed.

Likert (1967) found that attitudes toward other members of the organization were favorable and cooperative, with mutual trust and confidence, in the participative form of management, while similar results were found in a consultative form. A distinction between the two styles was noted as being that the latter form did not involve staff members in the actual decision-making process, rather it provided only for input into the information gathering process prior to the actual decision-making by the administration.

While this latter style produced results similar to the participative style, Likert (1967) reported an associated competition between peers resulting in some hostility. In contrast, "authoritarian" styles were reported as producing widespread subservient attitudes, coupled with hostility, distrust, and lack of confidence in the administration.

In similar fashion, Graff and Street (1956) reported that cooperation would be insured in a democratic framework where each individual was aware of the reasons for the work, had had a part in deciding upon the work, and knew very clearly what his tasks would be.

In advocating an employee-centered approach, Lucio and McNeil (1969) maintained that the individual should be central in all cooperative endeavors. The resulting relationships established with these

individuals would serve as the determinants of the quality and nature of the attitudes and behaviors of the total group. In characterizing the situation where cooperation would develop among individuals they included "effective communication, easy access to all necessary information, and opportunity to participate fully in shared tasks" (Lucio and McNeil, 1969, p. 181), as being essential.

The research cited here proposes an employee participation style of management as the means of obtaining employee cooperation. While other styles may provide more expedient means to goal attainment, they were not included here due to their lack of consideration given, or reference to the resulting level of employee cooperation. Upon completing the review of the preceding topics, the attention of the study was directed to a variety of disciplines in search of related findings. The following sections represent research reported by single studies, without supportive evidence.

Values. A suggestion of the influence of individual value systems on the cooperation existing between individuals was found in Simon (1970). He concluded that "The relationship of the values of interacting individuals with the consequences of their joint behavior determines whether the behavior pattern will be competitive or cooperative" (Simon, 1970, p. 77). The author inferred that groups composed of individuals possessing divergent value systems would tend to behave in a competitive manner. Similarly, those possessing comparable values would display behavior of a cooperative nature.

While support for this proposition was not found, the suggestion of the existence of a relationship between individual values and

cooperative behavior was believed by the researcher to be of significance for inclusion here. If support was found, however, a conflict situation would exist. To be resolved would be the educational question of whether faculty members of similar value systems are to be recruited for the sake of cooperation, or if a diverse representation is desired for the benefit of the students and the educational system.

Creativity. In commenting on the goals of social change, Wilson, et al., (1969) suggested that one goal be achieving a balance between creativity and cooperation. The rationale for this position, and its significance to the purpose of this study, was characterized by the following passage:

> Creativity often leads to conflict rather than cooperation; cooperation often leads to concensus which prevents creativity. Since education needs creativity to suggest the new and cooperation to achieve it, the goal is seen as both creativity and cooperation (Wilson et al., 1969, p. 19).

The authors, while presenting opinionated value judgements concerning a desired level of creativity and cooperation, have suggested a relationship between the two dimensions. An overbalance in either direction creates another paradoxical situation similar to that mentioned in the previous section.

Further support for this position was not found, however. The concept was included here for the purpose of providing a more complete picture of the possible associations of various factors with cooperation. Such was the case with the topic of conflict, treated in the following passage.

Conflict. Conflict between individuals or groups was treated in numerous sources; however, only one suggested a relationship with

cooperation. In attempting to delimit the conditions existing in a cooperative setting, Melchior (1950) displayed his view on the presence or absence of conflict in the following manner.

> Cooperation does not imply getting along together without signs of conflict; it does not mean quiet submission; nor does it mean necessarily a situation in which everyone is passively satisfied, or even happy (Melchior, 1950, p. 14).

Very clearly the author was pointing out that conflict situations can exist in a cooperative situation and that to have cooperation does not mean that everyone operates in a blissful state. Conflict situations then, do not preclude cooperation.

Trust. An examination in the field of social psychology for research reporting relationships with cooperation resulted in the location of one study which utilized a two-person mixed-motive game as the research model to study mutual trust. In the study, Rekosh and Feigenbaum (1966) utilized individuals holding similar positions within an organizational social structure to examine the influence of mutual trust on producing cooperative behavior.

They concluded that mutual trust between individuals was one determining factor in producing and maintaining cooperative behavior. While, as in the research reported previously, there was little or no supportive evidence for this, the results were believed to hold significance for the development of the basic hypothesis of this study.

Risk. Utilizing the same format as the preceding study, Maxwell (1971), examined the effect of "risk" on cooperative behavior. It was reported that the introduction of personal risk disrupted cooperative behavior and that increasing rewards for cooperating versus working individually

did not reduce the effect of this risk. It was further concluded that the effect of a large risk on cooperation was substantially reduced when the participants were permitted to utilize their abilities to communicate.

In summarizing these findings, cooperation can be said to be inversely related to the personal risk each individual is subjected to, and that the ability to communicate, not rewards, serves to minimize the effects of the risk.

Capital. In writing on the effect of capital on cooperation, Barnard (1938, p. 285) based on his findings, reported the following:

> From the point of view of organization, which is the chief instrument in economic development, all capital, whether of improvements, or machines, tools, and edifices, is always part of the physical environment. The direct significance of capital is that it reduced the limitations imposed by the natural environment on cooperation. Its indirect result is the expansion of the incentives to cooperation.

The author has not excluded the possibility of the existence of cooperative behaviors in situations where financial resources are extremely limited, rather has suggested that financial solvency removes physical constraints which tend to inhibit cooperation.

Presented in this section were those aspects uncovered in the review which provided some insight into the nature of cooperative behavior and their respective roles as determinants of cooperation. Due to the limited amount of research conducted and reported on this particular topic, most of the citations were without further documentation. Their inclusion was for the purpose of indicating the limited scope of previous investigations and as a starting point for the purpose of this study.

Conclusions, based on the studies presented, would suggest that cooperation is determined by a complex array of factors, both social and environmental, which must come together in some optimum fashion for its existence and persistence. Identified as having a relationship with cooperation were the effectiveness of the leader, quality of leadership, personal satisfactions gained by participants, style of leadership, degree of participant involvement in decision-making, extent of communication, divergence in value systems of participants, the level of creativity within the participant group, mutual trust, personal risk, and, to a limited extent, the capital resources available.

Summary of findings

In this section an attempt was made to present the findings of a review of research conducted on the topic of teacher cooperation as it related to elements of administrative behavior. Considered were the role of the principal, perception of behavior, influences on the organizational climate, definitions of cooperation, types of cooperation, and the nature of and influences on cooperation.

While reported research was readily available on the first three topics, the latter three, concerning cooperation, were limited in scope and number. The evidence presented in each of the sub-sections tended to support the following conclusions:

1. A primary determinant of the climate which exists in an organization is the individual providing the leadership for that organization.

2. Perception by individuals within an organization will vary and be dependent on the level of responsibility held in that organization.

3. Whether perceptions are accurate or not, those held by members of the participant group will serve to determine the effectiveness and efficiency of the cooperative effort.

4. Definitions of cooperation generally fall into two categories, distinguished by the inclusion of an element indicating whether or not the "working together" was a willing effort.

5. The extent of the willingness to work together and the forces motivating this behavior determine the type of cooperation existing.

6. Cooperation is determined by a complex array of factors; social, physical and environmental.

7. The extent of the cooperative effort provided is related to the quality and style of leadership provided, decision-making processes employed, effectiveness of communication, and the personal risk to which each participant is subjected.

The review demonstrated the limited extent of the research reported on the topic of cooperation. Utilizing what was available, however, the specific purposes for this study were developed and are presented in the following section.

Purposes of the Study

Interpersonal relationships appear to be at the very heart of the administrative process, and in order to help principals improve this aspect of administration, it seemed appropriate to investigate the topic of cooperation, an area relatively untouched by researchers, for relationships contributing to its determination. The initial step in conducting such a study was the delineation of an operational definition of cooperation and the development of an instrument capable of discriminating between levels of teacher cooperation. Portions of Chapter II were devoted to the development of the theoretical framework for validation and reliability tests of such an instrument.

The primary intent of the study was to determine if various levels of teacher cooperation, discernable by the instrument developed, were associated with certain identifiable characteristics of building principals. To achieve this central purpose, characteristics of the teaching staff and the community in which the school was located were to be compared with cooperation levels to determine if relationships existed. This procedure was followed by an analysis of the data for relationships between characteristics of the building principal and levels of teacher cooperation.

Personal characteristics of principals which were examined included age, number of years of administrative experience, and highest degree earned. Data on these variables were obtained from the principal through the use of a data sheet. Characteristics related to the principal's skills, abilities, and attitudes were also examined. Data on these latter variables were derived from results of teacher ratings of the principal on the 23-item Administrator Image Questionnaire of the Research, Evaluation, Design, and Experimentation Center at Western Michigan University. Theoretical hypotheses relating these variables are developed and presented in Chapter II, while a summary of the hypotheses tested appears in Chapter III.

Definition of Terms

The following list of definitions is presented so that the study may be understood and interpreted more accurately. A listing of each variable considered in the study and the means by which it was measured will be presented in the following chapter.

Effectiveness: A relative measure of the accomplishment of an institution's common purpose or purposes.

Cooperation: The willingness of an individual or group of individuals to contribute their talents, energies, and support for the completion of a task or attainment of a goal specified by the group or person of authority.

Administrator Image: The perception teachers have of their building principal's attitude, skill, knowledge, and behavior.

Building Principal: An individual charged with the responsibility for leading, managing, supervising or controlling a particular school unit in an educational system.

Central Office Administrator: An individual charged with the responsibility for immediate supervision of multiple school units, possessing a knowledge of each individual operation, yet not a direct participant in its daily activities.

Grievance: Any written complaint by an employee who believes that provisions of a master contract regarding wages, hours, or working conditions have been violated.

Reprimand: A verbal or written scolding of an employee, by a supervisor, for an action or inaction resulting in a deviation from the expectations held by that supervisor.

Scope and Limitations

This study utilized data obtained from three separate sources concerning 108 elementary school building principals and their respective teaching staffs located in Michigan, Indiana, Illinois and Minnesota. External ratings of the cooperation level existing in each building were obtained from central office administrators in charge of elementary education, while independent cooperation ratings and background information on the principal, staff, and community were supplied by building principals. Ratings of principals' images, derived from the mean scores of teacher ratings on the Administrator Image Questionnaire, (AIQ), were obtained through data made available

by the Research, Evaluation, Design, and Experimentation Center of Western Michigan University

The method of selecting the sample to be studied was based on an attempt to secure data on elementary building principals who had utilized the AIQ feedback instrument as part of a total administrative evaluation of their school district from 1973 through 1974, rather than selecting the population of individual subscribers to the feedback service. This procedure was utilized as an attempt to insure that those included were not just the type courageous enough to invite the kind of criticism contained in a reaction report of this nature. There is no certainty that this was fully achieved, however.

Control of the data collection was complicated by the tripartite nature of the source of information. Complete data on all 108 principals were not available for analysis, and application of the findings should occur only after careful consideration of the data obtained.

The specific intent of the study was to utilize information collected to validate an instrument for measuring levels of teacher cooperation and to determine relationships between characteristics of building principals and these levels. No attempt was made to determine causal relationships, and caution should be exercised in inferring the associations between teacher cooperation and selected variables representative of administrators, teachers, and communities, to elementary school settings in general.

Summary

The underlying purpose of this study was to gain insight into the task principals have of blending together the various aspects of the formal and informal organization, in which they find themselves, to promote a cooperative effort in achieving institutional goals. It appears that some have been adept at promoting such a cooperative atmosphere in their buildings, while others have not, and little research has been reported over the years that would suggest a means of measuring existing levels or theories to explain the differences.

Research on administrator effectiveness and influence on the organization has shown that the principal is in a position to directly determine the type of personal, social, and organizational relationships which exist. By association, it would seem that perceptions of the building principal's skills, knowledge, abilities, and behavior, held by the teachers in that building, would serve to determine the level of cooperation existing.

Development and validation of an instrument to measure these levels of teacher-principal cooperation and an identification of characteristics of principals related to these levels served as the major purposes of this study.

The theoretical framework and rationale for accomplishing these purposes are presented in Chapter II, which follows. Procedures to be followed in conducting the study, as approved by the researcher's doctoral committee, will be described in Chapter III. Chapter IV will treat the results of the investigation and present the findings, while Chapter V will consider the conclusions and recommendations of the study.

CHAPTER II

THEORETICAL FRAMEWORK

Introduction

According to Gunderson (1966), the development of a sound theoretical framework and rationale is essential to any research effort. In this chapter the central purpose was one of providing such a theoretical basis for the entire research effort. Presented here are the major hypotheses to be investigated, the rationale for the study, theoretical definitions of the concepts employed, operational definitions utilized, and assumptions and conditions made concerning the theory.

Hypotheses and Rationale

The major hypothesis of this research was that the level of teacher cooperation within a school building is directly related to certain identifiable characteristics of the building principal. Implicit within this was a secondary hypothesis that perceived characteristics of principals having an "employee-centered" nature would be significantly related to levels of teacher "cooperation," while those of an "organizational-centered" nature would have no significant relationship.

The development of these hypotheses was based on the assumption that if varying levels of cooperation within school buildings did in fact exist, then the differences might be attributable to certain identifiable factors. Barnard (1938), suggested that these were the physical, social, and emotional influences of the specific situation. While these may be determined by constraints imposed due to financial

limitations, composition of the group, or a diversity of values and beliefs, the building principal, as the educational leader, is in a position to determine and control these variables, and might provide the most significant influence of all.

A review of the literature provided evidence that suggested the existence of relationships between the leader's behavior and style and that of the employee's behavior. Halpin and Crofts' (1962) research demonstrated a relationship between the leader and the organizational climate, as did Koplyay and Mathis' (1967) findings on the relationship between the leader and employee morale. Further examples, such as Wiles' (1963) research on supervision, Barnards' (1938) findings on democratic management style and Likert's (1967) participative management studies, also provided support for this position. In each, an employee-centered approach was cited as producing the most significant results.

The similarity between cooperation, organizational climate, and morale, because of their employee-oriented character, suggested similar relationships with leader behavior and provided the foundation for this study.

To investigate the existence of such relationships, a model, tripartite in nature, was proposed. A graphic representation is shown in Figure 1. Input from the building principal, his immediate supervisor, and the respective teaching staff was to provide the basis for information and data collection. Through this input each would play an integral part in the investigation.

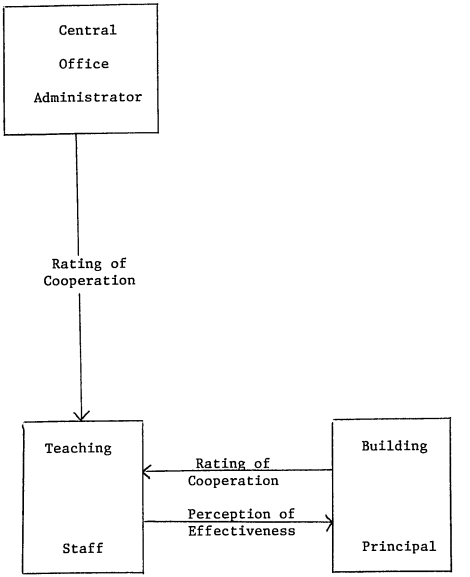


Figure 1.

Model for Data Collection

It was theorized that the building principal was in a position to supply pertinent, verifiable data regarding himself, the teaching staff and the community, and to make judgments relative to the cooperation gained from the teaching staff of the building in performing daily tasks and accomplishing long range goals.

To provide support for this judgment of cooperativeness, the immediate supervisor of the building principal was to be asked to provide a similar evaluation, as viewed from his position. It was assumed that, by viewing the total educational enterprise, a relative evaluation could be made by this individual which would substantially verify that which was to be completed by the building principal. Variations in the two were expected to be of a minimal nature and accounted for by the effects of differences in perception by individuals at various organizational levels of responsibility, according to Booker (1968), Costello and Zalkind (1963), and Likert (1967).

Further support of the principal's cooperation evaluation was to be derived from an association with an "uncooperativeness factor" composed of the number of grievances filed by teachers, and written and verbal reprimands administered by the principal. Rationale for this position stemmed from an assumption that in a situation where grievances were filed liberally and reprimands were meted out in significant numbers, a cooperative atmosphere was less likely to exist. This did not preclude the statements made by Melchior (1950) on the existence of conflict in a cooperative setting. The intent of the latter was construed as not meaning open hostility, as might be represented by this factor. Additional evidence regarding reliability

and validity of the measurement were to be obtained through correlational and two-factor analysis of variance techniques, outlined by Glass and Stanley (1970) and Kerlinger (1964), and presented in Chapter IV.

The role of the teaching staff was to provide the perception of the building principal in regard to his behavior, attitudes, skills and knowledge. Support for this position was derived from research reported on employee perception. While such perceptions may not have presented an accurate description of the principal's "true" character, they were representative of how he was perceived. These perceptions served as determinants of resulting employee attitudes and behavior, and thereby provided the link between employee cooperation and perceived characteristics of the principal.

In an attempt to show that resulting ratings of employee cooperation were directly attributable to characteristics of principals it was theorized that no significant relationship with characteristics of the teaching staff, or the community would emerge. Characteristics descriptive of the teaching staffs were to include the number of staff members, the number of male staff members, mean age of the staff, and the number of years experience represented by the staff. Characteristics of the communities were to be represented by the socio-economic status and type of location.

It was assumed that a range of cooperation ratings would be obtained, not significantly related to variables descriptive of the teaching staff, or community, with the variations produced directly related to characteristics of the building principal.

Definitions

The development of theoretical and operational definitions for the concepts employed served as the keystone to the entire effort. Given consideration here, with primary emphasis, are those of "cooperation," and "administrator image."

Cooperation

The definition of cooperation employed in this study was a synthesis of various elements presented in definitions by Melchior (1950), Good (1973), Barnard (1938), and Eye, et al. (1971). While each considered various aspects, such as cooperative people, systems, and organization, the major difference rested with whether or not the act of cooperative behavior was of a willing nature. The exception to this was Melchior's (1950) division, into eight levels of cooperation, where he provided for both voluntary and involuntary action on the part of the employee.

The hypothesis of this study proposed that cooperation from teachers is developed from positive attitudes resulting from images projected by the building principal. If this is true, then cooperation implies an inherent "willingness," thus this aspect was included in the definition utilized.

For the purpose of this study, then, cooperation was defined as the willingness of an individual or group of individuals to contribute their talents, energies, and support for the completion of a task or attainment of a goal as specified by the group or a person of authority.

Transforming this definition into operational terms, to produce measurable differences, was a formidable task. A list of behaviors

and teacher-administrator relationships was compiled, which served to contribute positively or negatively to the definition adopted. Due to the availability of elementary school organizations for study, the items included were designed specifically to represent behaviors and relationships displayed by elementary school teachers and principals.

This listing was then presented for consideration of appropriateness and omissions to a group of university professors, administrators in the business sector, practicing elementary principals, and teachers in classes offered in the Department of Educational Leadership at Western Michigan University. As a result of the reactions of these people, modifications and adjustments were made, resulting in the following criteria for determining the level of cooperation existing in elementary school organizations:

1. Compliance with principal's requests.
2. Relationships with the administration.
3. Solutions to problems.
4. Effect of teacher involvement in union on school operation.
5. Acceptance of changes in procedures.
6. Nature of absenteeism.
7. Nature of grievances and complaints.
8. Reliance on master contract.
9. Participation in staff meetings.
10. Involvement in parents' meetings.
11. Acceptance of committee assignments.
12. Identification with school goals.
13. Acceptance of extra assignments.

14. Acceptance of new projects and methods.

15. Extent of team effort.

16. Level of task performance.

17. Acceptance of criticism.

18. Nature of overall relationships.

19. Handling of discipline problems.

20. Promptness and accuracy in filing reports.

21. Perception and supervision of potential trouble areas.

22. Knowledge and understanding of the roles of others.

Each of the criteria was transformed into statements of observable behavior or attitude which could be rated according to frequency of occurance. Levels utilized were of the same format as employed by Halpin and Croft (1962) in their Organizational Climate Description Questionnaire (OCDQ) -- "rarely occurs," "sometimes occurs," "often occurs," "frequently occurs." As in the OCDQ, certain elements, numbers five, six, seven, ten, and seventeen, were presented in a reverse sense to provide for reliability of the response. The final version of this Faculty Cooperation Scale (FCS), as approved by the author's doctoral committee, appears in Appendix A.

Administrator image

Of equivalent importance to the study was the delineation of the term "administrator image" and the selection of an appropriate instrument which would provide measurable results.

In reviewing the body of research relating to administrator "effectiveness" it was concluded by the researcher that group ratings

of administrator performance could very well serve as a measure of the interpersonal relationship between the administrator and the rating group. Hansen's (1971) research on ratings of administrator effectiveness supports this conclusion and is exemplified in the following passage selected from the work of Brown (1967, p. 62):

> It is assumed at the outset that one can learn something of the leadership of a school from the staff perceptions -- and judgments drawn there from -- of the principal. This is so because of a more basic assumption that a perception of another person is a function of both sender and receiver of the precept. A descriptive statement based on such perceptions therefore gives away the nature of the describer as well as the described -- sometimes, as with projective materials, to an even greater degree.
>
> Staff statements describing the leader behaviors of their principal are useful sources from which to draw inferences relative to the nature of leadership existing in the school.

Based on the foregoing, the definition of "administrator image" adopted for the purpose of this study was: The perception teachers have of their principal's attitude, skill, knowledge and behavior.

In attempting to reduce this definition to more specific terms, two general categories -- "employee centered," and "organizational centered" -- were selected as the two extreme orientations a principal might be perceived as possessing.

Support for such a breakdown was found in Reddin (1967), who stated that a leader's performance was influenced by two underlying variables which he termed "task-orientation" and "relationship orientation." Owens (1970) suggested that the terms "structure" and "consideration" were being widely used.

Halpin (1970), through a factor analytic technique, isolated two factors in his work with the Leader Behavior Description Questionnaire,

(LBDQ) which he termed "initiating structure-in-interaction" and "consideration." He described the former as relating to behavior characterized by attempts to delineate relationships between the leader and members of the group, establishing well-defined patterns of organization, while the latter was described as behavior reflecting friendship, mutual trust, respect, and warmth by the leader.

Kimbrough (1959) isolated five characteristics of the effective leader in the development of the Tennessee Rating Guide, which could be considered as being either person-centered or organization-centered.

Brown (1967) labeled two dimensions in his studies as being "person" and "system," while writers Blake and Mouton (1964) and Kepner and Tregoe (1966) referred to two factors identified as "production-centered" and "human-centered."

For the purpose of this study the definition of "employee-centered" image adopted was: The perception held by teachers of the interpersonal relationships developed and maintained by their principal. "Organizational-centered" image was defined as: The perception held by teachers of their principal's behavior, attitude, skill, and knowledge in completion of tasks and goal attainments.

To transpose these definitions, administrator image, organizational-centered image, and employee-centered image, into quantifiable terms, the Administrator Image Questionnaire (AIQ) of the Research, Evaluation, Design and Experimentation Center (R.E.D.E. Center) at Western Michigan University was selected for use.

According to literature from the R.E.D.E. Center (1970), the twenty-three item AIQ measures individual perceptions of administrator

attitudes, understanding, skills, and behavior. Ratings on these items by individual teachers are combined to form group mean ratings and an overall group mean rating for all items. The results are then presented in profile form. Chance-half reliability coefficients from the AIQ items were reported to have ranged from .82 to .93 (R.E.D.E. Center, 1970, p. 3). Copies of the AIQ and a sample profile are included in Appendix B.

Items included in the AIQ which were to be utilized individually and collectively for determining how the administrator was perceived by his teaching staff are defined as shown in the listing below. Each served as a characteristic of the building principal. Respondents were asked to react to each item, posed in a question format, with the choices being "poor," "fair," "average," "good," and "excellent." A listing of the characteristics of building principals included in the AIQ and their interpretations is as follows:

1. Verbal fluency. A description of the principal's ability to express ideas smoothly and be articulate.

2. Consideration of others. A description of how patient, understanding, considerate, and courteous the principal is in working with others.

3. Attitude toward his job. A description of the principals' enthusiasm and interest in his work.

4. Technical competence. A description of the principal's knowledge and understanding of his field.

5. Achievement drive. A description of the principal's initiative and persistence to accomplish meaningful goals.

6. Supportiveness. A description of the support given to those responsible to the principal.

7. Flexibility. A description of how well the principal is able to adjust to changes in plans or procedures.

8. Performance under stress. A description of how well the principal performs under pressure.

9. Openness. A description of the principal's attitude towards considering divergent views.

10. Encouragement of staff participation. A description of the extent to which the principal encourages the raising of questions and expression of opinions.

11. Ability to delegate responsibility. A description of the principal's ability to assign tasks to personnel capable of carrying them out.

12. Innovativeness. A description of the extent to which the principal is willing to try new methods or approaches.

13. Success in communicating expectations. A description of the principal's ability to clearly define and express what is expected of staff members.

14. Fairness. A description of the ability to treat staff members in an unbiased and impartial manner.

15. Maintenance of staff morale. A description of the principal's ability to create a feeling of unity and enthusiasm among those in contact with him.

16. Sense of humor. A description of the extent to which the principal laughs at his own mistakes and entertains a sense of the ridiculous.

17. Decision-making ability. A description of the principal's ability to make constructive decisions.

18. Evaluating ability. A description of the principal's ability to objectively evaluate programs and practices.

19. Managerial skill. A description of the extent to which the principal is able to coordinate the efforts of those responsible to him so that the organization operates at peak efficiency.

20. Awareness. A description of the extent to which the principal is conscious of the problems existing at the teacher's level.

21. Self-control. A description of the principal's ability to maintain control of his emotions when things are not going well.

22. Leadership skill. A description of the principal's ability to attain mutually acceptable goals.

23. Appearance. A description of the extent to which the principal exemplifies good taste in grooming and attire.

24. Mean administrator image. An arithmetic mean score derived from the weighted responses to all twenty-three items on the questionnaire.

To obtain operational definitions of organizational-centered image and employee-centered image, elements of the twenty-three items on the AIQ were grouped according to the results of Hansen's (1971) findings on analysis of the AIQ. Using a factor analysis technique on the ratings of 303 administrators by 7004 raters, the latter found that two principal factors emerged which accounted for approximately 76% of the total variance in the questionnaire. These he termed "general evaluative factor" and "person-centered" (Hansen, 1971, p. 94).

Consistent with these findings, the organization-centered image was to be represented by the mean ratings on the following items included on the AIQ:

1. Verbal Fluency.
2. Attitude toward job.
3. Technical competence.
4. Achievement drive.
5. Flexibility.
6. Performance under stress.
7. Ability to delegate responsibility.
8. Success in communicating expectations.
9. Decision-making ability.

10. Evaluating ability.
11. Managerial skill.
12. Self-control.
13. Leadership skill.

Employee-centered image was to be represented by the mean ratings on the following items included on the AIQ:

1. Consideration of others.
2. Supportiveness.
3. Openness.
4. Encouragement of staff participation.
5. Innovativeness.
6. Fairness.
7. Maintenance of staff morale.
8. Sense of humor.
9. Awareness.
10. Appearance.

Building principal

For the purposes of this study, building principal was defined as an individual charged with the responsibility for leading, managing, supervising or controlling a particular school unit in an educational system. Only principals of public elementary school units were included in this study.

Central office administrator

Central office administrator was defined for use in this study as an individual charged with the responsibility for the immediate

supervision of multiple units within a school system, possessing a knowledge of each individual operation, yet not a direct participant in its daily activities. Included in the study were superintendents, assistant superintendents for instruction, directors of curriculum, and directors of elementary education.

Other variables

A total of twelve other independent variables were selected for investigation to determine their relationship to cooperation. Data pertinent to these variables were to be obtained from a Data Sheet which accompanied the FCS sent to each building principal participating in the study. A description and operational definition of each independent variable follows:

1. Principal's age. Ages of principals, to the nearest whole year, taken from the Data Sheet.

2. Highest degree earned. Degree titles entered by principals on the Data Sheet. Categories to which each was to be assigned are as follows:

   Bachelor's
   Master's
   Specialist's
   Doctor's

3. Years of administrative experience. Responses to the question were to indicate the principal's number of years of administrative experience to the nearest whole year.

4. Number of certified teachers. This question was to elicit the total number of certified teachers assigned to the building under the principal's supervision.

5. Average age of teaching staff. The response to this question on the Data Sheet was to determine the average age of the teaching staff to the nearest whole year.

6. Number of males. Information supplied by the building principal on this item was to provide the total number of males on his teaching staff.

7. Teacher experience. Responses to this item on the Data Sheet were to indicate the approximate percentage of the teaching staff possessing 0 to 3, 4 to 10, and 11 or more years of teaching experience.

8. Grievance. Any written complaint by an employee who believed that provisions of a master agreement regarding wages, hours, or working conditions had been violated. Principals were to indicate the number submitted this past school year according to the following categories:

   0 grievances
   1-4 grievances
   5-9 grievances
   10 or more grievances

9. Verbal reprimand. A verbal scolding of an employee by a supervisor for an action or inaction resulting in a deviation from the expectations held by the supervisor. Principals were to indicate the number required by teachers during this past school year according to the following categories:

   0 reprimands
   1-4 reprimands
   4-9 reprimands
   10 or more reprimands

10. Written reprimand. A written form of scolding for an offense considered of a more serious nature than those requiring a verbal reprimand. Principals were to identify which of the following categories represented the number written during the past school year:

    0 written reprimands
    1-2 written reprimands
    3-4 written reprimands
    5 or more written reprimands

11. Community socio-economic status. Principals were to identify the type of socio-economic status of the communities in which their school building was located by indicating the most appropriate category: low, average, or high.

12. Type of location. Responses to this question on the Data Sheet, to be completed by the principal, were categorized as follows: rural, or urban.

Summary

In this chapter an attempt was made to provide the theoretical framework and rationale for the study. Essentially, the study consisted of the validation of an instrument to measure teacher cooperation through the use of external ratings of cooperation by supervisors, internal ratings of principals by teachers, and verifiable data involving grievances and reprimands. In addition, each of the terms and variables utilized in the study was defined in a theoretical and operational sense. The procedure for utilizing these concepts, the data treatment, and the selection of the sample studies are treated in the following chapter.

CHAPTER III

PROCEDURES USED IN THE STUDY

Introduction

The purpose of this chapter is to describe the procedures utilized in conducting the study. Included are descriptions of the basic design, the sample studies, the steps that were followed in conducting the study, the hypotheses tested, the tests of significance used to support or reject the hypotheses, and the extent to which the assumptions underlying the statistical procedures were satisfied.

The Design

As described in Chapter II, the basic design of the study was tripartite in nature. Essentially, data were collected on elementary building principals, their staffs, and the communities in which they worked, determining relationships which supported or rejected the major hypotheses. Sources on information were the files of the Research, Evaluation, Design, and Experimentation Center (R.E.D.E. Center) of Western Michigan University, which provided the teacher ratings of principals' image on the Administrator Image Questionnaire (AIQ), the Faculty Cooperation Scale (FCS), and the Data Sheet, completed by each participating principal, and the FCS completed by the principal's supervisor.

The reliability and validity of the FCS were analyzed through the use of an analysis of variance, t-ratios, and product-moment, point-biserial, and Spearman rank-order correlations. Specifically

investigated were variables descriptive of the teaching staff, the principal, and the community.

Description of the Sample

The sample selected for study consisted of all elementary principals who had utilized the services of the Research, Evaluation, Design and Experimentation Center of Western Michigan University as part of an apparent school district-wide administrative evaluation during the 1973-74 and 1974-75 school years. A total of 108 elementary principals from 14 different school districts comprised the sample. Those principals who individually requested the use of the feedback service rather than being included in a request by a school district for a total administrative evaluation were not included.

The 108 principals studied, twelve of which were female and 96 male, were geographically distributed in four states, as is indicated in Table 2.

Table 2

Geographic Distribution of Sample

State	Number
Michigan	80
Indiana	18
Minnesota	7
Illinois	3
Total	108

Procedure

The process of gathering data consisted of collecting pertinent data, as described herein, from three separate sources: (1) the Research, Evaluation, Design, and Experimentation Center of Western Michigan University, (2) individual elementary building principals, and (3) the principal's immediate supervisor.

The AIQ data

Data collected from the files of the R.E.D.E. Center provided group perceptions of the principals' images based on the use and analysis of the Administrator Image Questionnaire (AIQ). This service provides a tabulated image profile representing average group reactions to questions believed to be related to administrator effectiveness for the administrator on whom the data are gathered. These group perceptions are obtained through the completion of the AIQ by the administrator's staff, requiring approximately 15 to 20 minutes to complete.

Simple instructions accompany each AIQ set which requested that someone other than the administrator being rated administer the questionnaire and that group responses be collected and returned to the Center in a pre-addressed envelope after completion. Individual responses were anonymous and tabulated results were returned to only the administrator being rated.

The questionnaire was designed to measure reactions to 23 items selected as pertaining to administrator effectiveness. Raters were asked to respond to items by selecting one of the five possible

choices: (1) poor, (2) fair, (3) average, (4) good, or (5) excellent. Items are in a format such as the following:

Verbal Fluency. (Does he express his ideas smoothly? Is he articulate?)

Consideration of Others. (Is he patient, understanding, considerate and courteous?)

A complete copy of the AIQ is found in Appendix B.

Each response was assigned a weighting factor of 1 to 5 respectively to the range of responses "poor" to "excellent." Analysis of the total group ratings provided an arithmetic mean score for each item, and a composite of all 23 items, which was then presented to the administrator in profile form. An example of the format utilized is shown in Figure 2 for four items. A complete sample profile may be found in Appendix B.

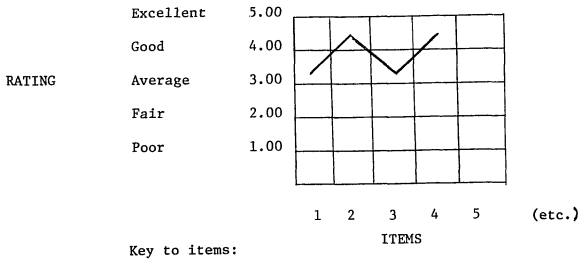


Figure 2

Example Profile for Four Items

Mean group ratings on the 23 AIQ items and composites for each member of the sample were obtained from the R.E.D.E. Center, key-punched on tape, and stored in the memory bank of the Western Michigan University PDP-10 computer. The data were checked for errors and readied for analysis with sub-routines of the Western Michigan University Computer Center Bank program.

The FCS and Data Sheet

Data on the cooperation level of each individual teaching staff were obtained from the building principals in the sample through the use of the Faculty Cooperation Scale (FCS). The FCS, a 22 item questionnaire developed from theoretical and operational definitions of cooperation adopted in this study, provided a numerical rating of the cooperation level existing in each of the elementary buildings studied. This was achieved by assigning weighted values from 1 to 4 respectively to the responses: (1) rarely occurs, (2) sometimes occurs, (3) often occurs, and (4) frequently occurs. Items phrased in a reverse sense, numbers 5, 6, 7, 10 and 17, were assigned weighting factors in a reverse sense. Ratings of the cooperation level were obtained by summing the weighting factors to each of the 22 items. The range of scores possible extended from 22 to 88.

Instructions that accompanied the FCS requested that the building principal indicate to what extent each of the 22 descriptions characterized the teaching staff of the building. Examples of items included on the FCS are as follows:

1. Teachers work as a team in achieving school goals.
2. Teachers perform tasks willingly.

3. Teachers comply with the principal's requests promptly.

4. Teachers seek solutions, or desired outcomes, in a friendly, informal, non-agressive manner.

A complete copy of the FCS and instructions are shown in Appendix A.

A Faculty Cooperation Scale was mailed to each building principal in the sample during the month of May, 1975. Accompanying the FCS were a letter requesting assistance in the study from the Associate Dean of the College of Education, Western Michigan University, a letter from the author explaining the purpose of the study and a request for their participation, and a business reply envelope for return of the completed instrument. Examples of the enclosures are shown in Appendix C.

Also included in the packet mailed to principals was the Data Sheet, which requested information concerning the principal, the staff, and the community, shown in Appendix A. Information provided was coded numerically, key-punched, and stored in the computer for use in the analysis.

The central office administrator FCS

To obtain an independent rating of the cooperation level existing in individual school buildings, a request was made of the immediate supervisors of the principals in the sample. In most situations they were considered central office administrators, with their positions within the educational organization dependent on the size of the school district. In some cases the supervisor was the superintendent of schools, while in others it was an assistant superintendent for instruction, curriculum director, or director of elementary education.

A mailing was made to the individuals in the fourteen school districts who supervise elementary principals, requesting their assistance in the study. Included in the mailing were the letter from the Associate Dean, as was mailed to principals, a letter explaining the central office administrator's role in the study, as shown in Appendix C, and a copy of the FCS instrument.

In most instances the central office administrator was required to complete an FCS for more than one building. To assist in this task a response sheet for multiple units was enclosed in the mailing, as well as a pre-addressed business reply envelope for return of the completed instrument. This mailing coincided with that which was made to building principals.

The follow-up

After the passage of fourteen days from the date of the initial mailing, a follow-up request was mailed to those building principals and supervisors whose reply had not been received. Letters were enclosed reminding them of the initial mailing and asking for their assistance. Copies of both letters are shown in Appendix D. Enclosed also were an additional copy of the FCS instrument, a Data Sheet for principals, a multiple response sheet for central office administrators, and a pre-addressed reply envelope.

Those who did not respond after ten days of the mailing of the follow-up request were contacted by telephone in an attempt to determine the cause of the lack of response and provide any additional assistance necessary.

Summary of Hypotheses

The purpose of this section is to present a summary of the hypotheses tested in the study. Preceding each hypothesis is a review of the relationship between variables established for determining the validity of the FCS instrument, and those relating the FCS score to characteristics of the building principal.

To provide a measure of the validity of the FCS instrument, a premise was considered that the number of grievances submitted, and verbal and written reprimands required, and a composite of these, in the form of an "uncooperativeness" factor, were inversely related to the level of cooperation. In hypothesis form, these relationships appear as follows:

H_1: The number of grievances submitted, verbal and written reprimands required by a teaching staff are inversely related to the FCS score.

H_2: The composite "uncooperativeness" factor is inversely related to the FCS score.

A second premise, devised to test the validity of the instrument, was that the FCS score determined by the building principal and the "known-group" rating of his supervisor would not be significantly related. In hypothesis form this appears as follows:

H_3: There will be no significant agreement between the FCS scores obtained from building principals and those of their supervisors.

The major hypothesis of the study contends that teacher cooperation is dependent on characteristics of the building principal and that influences such as community size and status, and variables descriptive of the teaching staff are negligible. Hypotheses relating these latter variables to the FCS score appear as follows:

H_4: There is no significant relationship between the FCS score and community size and socio-economic status.

H_5: There is no significant relationship between the FCS score and the number of certified teachers on the teaching staff.

H_6: There is no significant relationship between the FCS score and the number of male teachers on the teaching staff.

H_7: There is no significant relationship between the FCS score and the average age of the teaching staff.

H_8: There will be no significant agreement between the mean FCS scores of teaching staffs composed primarily of teachers having less than four years experience and those of eleven or more years.

The primary purpose of the study was to identify characteristics of principals related to the cooperation provided by their teachers. Included in the study were certain verifiable data, such as age, years of administrative experience, and teacher perceptions of the principal's image, as measured by the AIQ. To test the relationship of these variables to the level of cooperative effort they were included in the following hypotheses.

H_9: Variables descriptive of a principal's age, highest degree earned, and number of years of administrative experience are directly related to the FCS score.

H_{10}: The FCS score is directly related to the principal's image, as derived from the 23 items on the Administrator Image Questionnaire.

A secondary hypothesis of the study was that the level of cooperative effort derived from a teaching staff was dependent specifically on elements of the principal's employee-centered image and unrelated to his organizational-centered image. In hypothesis form, they appear as follows:

H_{11}: The 10 elements comprising a principal's employee-centered image are directly related to the FCS score obtained on his teaching staff.

H_{12}: There is no significant relationship between the FCS score and the 13 elements comprising a principal's organizational centered image.

Tests of Significance

The determination of the most appropriate test of significance for testing the hypotheses was dependent on the nature of the measurement utilized. Of the 17 variables considered, each was of interval measurement, as determined by the criteria specified by Siegel (1966), with the exception of the variables termed "socio-economic status of the community," "type of location," and "highest degree earned," which were nominal measurement.

For those hypotheses tested involving variables of interval measurement, parametric tests of significance were utilized. To determine relationships between these variables, the Pearson product-moment correlational model was employed. The determination of significant differences between variables was achieved through use of the most powerful of all parametric tests, the t-test.

Justification for the use of these parametric tests of significance emanated from the sample under study satisfying the four underlying conditions required of parametric tests. These conditions, as presented by Siegel (1956, p. 19), are as follows:

1. The observations must be independent.
2. The observations must be drawn from normally distributed populations.
3. These populations must have the same variance.

4. The variables involved must have been measured in at least an interval scale.

Selected as the level of significance, or the degree of risk of incorrectly drawing conclusions on the hypotheses, was the value .05. The critical regions associated with this level of significance were determined for each treatment, based on the number of observations on each variable.

Hypotheses tested involving variables of nominal measurement were treated with the non-parametric tests of relationship known as the point-biserial and the Spearman rank-order correlation method. While these do not provide the power of a parametric test, they were the most appropriate tests to be used due to the nature of the variables.

Summary

This chapter presented the basic procedures utilized in conducting the study. Esssentially it consisted of drawing information from the files of the R.E.D.E. Center, from elementary building principals who had made use of the R.E.D.E. Center services, and from the principals' supervisors. Combined, this information provided the basis for determining the level of teacher cooperation within individual buildings and an identification of certain characteristics of building principals associated with it.

Through the use of this information, the hypotheses were tested examining the validity of the Faculty Cooperation Scale, and relationships between variables theorized as existing.

Presented in Chapter IV are the results obtained from the procedures specified in this chapter.

CHAPTER IV

RESULTS OF THE STUDY

Introduction

The data, gathered according to the procedures outlined in Chapter III, were statistically analyzed by means of *t*-tests, two-factor analysis of variance, Pearson product-moment, point-biserial, and Spearman rank-order correlational models. Presentation of the results of the collection of data, and analysis, served as the major purpose of this chapter. Given treatment here are a description of the data obtained, the results of the analyses pertaining to the reliability and validity of the FCS instrument, and the findings of the attempt to identify characteristics of building principals associated with levels of teacher cooperation.

The Return

Under procedures adopted for completion of this study, data were collected from three different sources: (1) elementary building principals, (2) central office administrators responsible for supervising building principals, and (3) the Research, Evaluation, Design, and Experimentation Center of Western Michigan University. Presented in this section are the results of the attempt to gather data from these sources.

Return from principals

As outlined in Chapter III, each of the 108 elementary building principals selected for study was to receive a copy of the FCS

instrument and Data Sheet. Return of these instruments, prompted by the initial request and follow-up procedures, provided data on 91 elementary buildings. This represented a return rate of 84.2%.

Of the 91 principals responding, 10 were female and 81 male. One of these respondents, however, failed to complete data requested on the Data Sheet, thus reducing the number available for a total analysis to 90.

The ages of those responding ranged from 27 to 63 years old with a mean age of 44.6. The highest degree earned by these principals were distributed as follows: Bachelors' - 2, Masters' - 65, Specialists' - 21, and Doctorates' - 2.

Principals characterized the socio-economic status of the communities in which they worked in the following manner: low - 18, average - 57, and high - 15. Twenty-eight of these were identified as being in a rural setting, while 62 were characterized as urban.

Return from central office administrators

Central office administrators responsible for supervision of the elementary principals involved in the study were asked to complete an FCS instrument on each of the elementary principals in their school district; a procedure requested by the researcher's doctoral committee. In that the 108 principals were distributed in fourteen school districts, the range of FCS instruments to be completed by supervisors extended from one to seventeen. For most this was a formidable task, requiring a considerable expenditure of time, and the results tend to reflect this.

Responses from eleven of the fourteen central office administrators were received. Two of these consisted of one rating for all buildings rather than one for each. As a result, administrator FCS ratings for only forty-three buildings were received, representing a 39.8% rate of return. Corresponding returns of the FCS instrument from three principals were not received, thus the total set of corresponding FCS ratings available for analysis was 40.

R.E.D.E. Center data

Data made available and obtained from the R.E.D.E. Center provided the results of teacher ratings on the AIQ instrument for 67 elementary principals in the fourteen school districts. Six of these principals did not return a completed FCS instrument, leaving a total of 61 sets of corresponding data for analysis.

While an attempt was made to select school districts that had requested or completed a total administrative AIQ evaluation, a number of individual principals did not complete and return the instrument to the Center for analysis, and in two cases, the school district did not confirm their request for service.

The Instrument

Included in this section are the results of the analysis directly concerned with the reliability and validity of the Faculty Cooperation Scale. Presented are the results of the tests of significance on each hypothesis delineated in the description of the procedure to be utilized.

Reliability

The reliability of the Faculty Cooperation Scale was tested by a procedure outlined by Kerlinger (1973). This involved the calculation of a reliability coefficient (r_{tt}) through the use of a two-factor analysis of variance. The determination of this coefficient was based on Kerlinger's (1973) rationale for, and definition of, "error" variance and "true" variance.

The relationship used to calculate this reliability coefficient was in the form:

$$r_{tt} = 1 - V_e/V_{ind}$$

where V_e represents the variance error, estimated by the residual mean square from the two-factor analysis of variance, and V_{ind} represents the total variance between individuals.

Each of the twenty-two FCS items for the 91 returned instruments were treated as individual cells in the analysis. The results, as shown in Table 3, revealed a mean square of 3.06 and an F-ratio of 12.70, significant at the .001 level, for variance between individuals. The residual variance was reported as .24. Utilizing these data the calculated coefficient of reliability was .92. The associated coefficient of determination with this coefficient of reliability was 84.6%, which indicated a common sharing of the total variance between the 22 FCS items.

While reliability does not indicate validity, the latter can not be achieved without the former. The reliability coefficient of .92, from the analysis of variance technique, provided evidence of the reliability of the FCS instrument.

Table 3

Two-Factor Analysis of Variance for
Faculty Cooperation Scale Items and Individual Responses

Source	d.f.	S.S.	M.S.	F
Between items	21	292.2	13.92	57.76
Between individuals	90	275.1	3.06	12.70
Error	1890	456.1	0.24	
Total	2001	1111.4		

Validity

For the purpose of testing the validity of the FCS instrument three specific hypotheses were delineated and presented in Chapter III. The results of the tests of significance on these statements are presented in this section. In addition, the results of a correlation between individual variables and the total score achieved are reported.

The hypothesis tested relating the number of grievances and reprimands to the FCS total score was as follows:

H_1: The number of grievances submitted, verbal and written reprimands required by a teaching staff are inversely related to the FCS score.

Spearman rank-order coefficients of correlation were computed for the relationships between each of the three variables and the FCS total, and tested at the .05 level of significance. Each indicated an inverse relationship, as predicted, however, only the relationship with verbal reprimands possessed the strength necessary to support the hypothesis. The coefficients calculated are shown in Table 4.

Table 4

Coefficients of Correlation for the Relationship of Grievances, and Reprimands with the FCS Total Score

(n = 90)

Variable	r
Number of grievances filed	-.04
Number of verbal reprimands issued	-.21*
Number of written reprimands required	-.17

*Significant at .05 level

Examination of the relationship between the uncooperativeness factor and the FCS total score was achieved through the testing of the following hypothesis:

H_2: The composite uncooperativeness factor is inversely related to the FCS score.

The test of this hypothesis was conducted by computing the product-moment coefficient of correlation between the two variables. A value of -.21 was obtained, indicating an inverse relationship similar to those obtained for the elements which composed this factor. This correlation was significant to the .05 level and the hypothesis was confirmed.

The tests of these two hypotheses provided evidence on which to conclude that the lack of cooperation represented by grievances and reprimands was inversely related to the cooperation score derived from the FCS instrument.

A second aspect, which concerned the validity of the FCS instrument, involved the testing of the agreement between the FCS score

of the building principal and the "known-group" FCS score of his immediate supervisor. The hypothesis tested was as follows:

H_3: There will be significant agreement between the FCS scores obtained from building principals and those of their supervisors.

A Pearson product-moment coefficient of correlation was computed to test this hypothesis. This test, when applied to the set of 40 matched pairs of FCS scores, yielded a coefficient of .29. This was not significant at the .05 level, where the critical value was .30, and the hypothesis was not accepted.

It was concluded that the independent ratings provided by the central office administrators were not significantly in agreement with those of their building principals.

A final measure for examining the validity of the instrument involved one of the simplest and most direct techniques in the field of measurement. This was one of correlating each individual FCS item with the total score achieved on the instrument. If the items correlated with each other and the total score, at the .05 level, then the content validity of the instrument has been confirmed, i.e., the items conform with the definition of cooperation established. The results of the correlation are shown in Table 5.

With the exception of item number 10, referring to teacher reliance on the master contract in dealing with administrative requests or directives, all items showed a positive correlation with the total score, significant at the .05 level.

Two items, identification with school goals, and the willingness to perform tasks, each produced coefficients in excess of .70, and

Table 5

Product-Moment Coefficients of Correlation Between FCS items and the FCS Total Score

(n = 91)

	FCS item	r
1.	Teamwork in achieving goals	.62
2.	Willingness to perform tasks	.71
3.	Compliance with requests	.52
4.	Friendly seeking of solutions	.54
5.	Union involvement	.53
6.	Absenteeism	.56
7.	Pettiness of complaints	.39
8.	Support of administration	.41
9.	Acceptance of change	.59
10.	Reliance on master contract	.12
11.	Attitudes in staff meetings	.50
12.	Parent meeting involvement	.52
13.	Assignment to committees	.66
14.	Identification with school goals	.75
15.	Acceptance of extra-duty	.68
16.	Reception of new methods or projects	.62
17.	Acceptance of criticism	.58
18.	Assistance in supervising	.49
19.	Handling of classroom discipline	.62
20.	Prompt completing of records/reports	.59
21.	Knowledge of roles of others	.61
22.	Cooperation with principal	.55

were surpassed by no other item. Clustering below these two were items referring to teamwork, enthusiastic acceptance of committee assignments, willingness to accept extra-duty assignments, acceptance of new projects or methods, and a knowledge and understanding of the roles of others in the building.

Items producing coefficients of correlation less than .50 referred to the pettiness of grievances and complaints, supportive relationships with the total administration, reliance on a master contract in dealing with administrative directives or requests, and anticipating situations requiring adult supervision.

Coefficients determined between the total score and the sums of the odd-numbered and even-numbered items were of identical nature, .95. Interpretation of this finding suggested that either of the two sums could have produced essentially the same results as the total instrument.

The results in this section, treating the validity of the instrument, tended to be supportive of the instrument's capability to discriminate between levels of cooperation. Coefficients of correlation involving verbal reprimands, and an uncooperativeness factor were significant at the .05 level, and each substantiated the direction of the predicted relationship. Each of the FCS items, with the exception of one, was found to be significantly correlated with the total score produced on the FCS instrument, confirming the content validity of the instrument. Independent ratings by central office administrators, however, were found not to be in significant agreement with those provided by the individual building principals. Items producing the

most significant relationship included the terms "willingness to" or "acceptance of," or treated theoretical concepts as identification with institutional goals, or understanding the roles of others. Each of these latter terms was identified as being related to the concept of cooperation in the review of research presented in Chapter I, and was a component of the definitions considered in Chapter II.

It was concluded that the FCS instrument provided the reliability and validity necessary to discriminate between varying levels of teacher cooperation. On the basis of this conclusion, an analysis of the data was conducted in an attempt to identify characteristics associated with the varying levels obtained. The results of these analyses are presented in the following section.

Relationship of Characteristics

This section reports the findings of the tests of significance on the relationships between the total FCS score and characteristics of the community in which the school building was located, the teaching staff, and the building principal. Investigated were variables reported directly by the principal, and perceptions of the principal's skills, attitudes, knowledge and behavior, as reported by his teaching staff on the AIQ.

In determining the influence of community size and status on the FCS instrument the following hypothesis was tested:

H_4: There is no significant relationship between the FCS score and community size and socio-economic status.

The results obtained from the Data Sheet, pertinent to the two items contained in the hypothesis are shown in Table 6.

Table 6

Community Type of Location and Socio-Economic Status

Descriptor	Number
Type of Location	
Rural	28
Urban	62
Socio-Economic Status	
Low	18
Average	57
High	15

Due to the dichotomous nature of the data provided by the variable community type of location, a point-biserial correlation was utilized to determine the relationship with the FCS total score. The coefficient of correlation was -.19. This was not significant at the .05 level.

The three designations of socio-economic status were of ordinal nature and required the use of a Spearman rank-order correlational technique to determine its relationship to the FCS total score. A coefficient of .18 was obtained, which was not significant at the .05 level. The results of these fail to reject the hypothesis.

The influence of certain characteristics descriptive of teaching staffs on the FCS total score were tested by means of the following hypotheses:

H_5: There is no significant relationship between the FCS score and the number of certified teachers on the staff.

Data obtained from the Data Sheet on the number of teachers in each building ranged from 6 to 49, with a median of 18, and was bimodal in nature with values of 12 and 19. The resulting product-moment coefficient of correlation between the number of teachers per building and the FCS total score was .07. This was not significant at the .05 level, and the hypothesis was not rejected.

H_6: There is no significant relationship between the FCS score and the number of male teachers on the teaching staff.

The data indicated that the number of male teachers per building ranged from 0 to 10, with a median of 3 and a mode of 2. Only five of the buildings reported having no male teachers on their staff. A coefficient of .06 was calculated as the product-moment correlation between the number of males on the teaching staff and the FCS score. This was not significant at the .05 level, and the hypothesis was not rejected.

H_7: There is no significant relationship between the FCS score and the average age of the teaching staff.

The range of average teacher ages reported extended from a minimum of 25 to a maximum of 48 years old. This set of data had a mean of 35.1 years, and a mode of 35 years, which occurred in 17.8% of the cases. Only 6.6% of the responses indicated an average age above 40 years old.

A product-moment correlation coefficient of -.20 was obtained. This relationship suggests that as the average age of the teaching staff increases, the FCS total score decreases; however, the correlation was not significant at the .05 level.

H_8: There is no significant difference between the mean FCS scores of teaching staffs composed primarily of teachers having less than 4 years experience and those with 11 or more years.

To determine the composition of the teaching staff in each building, in regard to teaching experience, principals were asked to indicate what percent of their staff had 0-3 years of experience, 4-10 years, and 11 or more. These data are reported in Table 7.

Table 7

Summary Data of Percentages of Teaching Experience

(n = 90)

Teaching Experience	Median (%)	Range (%)
0 - 3 years	15.0	0 - 80.0
4 - 10 years	45.0	0 - 84.0
11 or more	34.5	0 - 99.0

For purposes of testing, the data were categorized into "high" and "low" experience groups. The division was accomplished by grouping the FCS scores of those schools which reported percentages of staff exceeding the median values of the total data set in one of the experience categories, 0 to 3 years, or 11 or more years. Schools reporting percentages which exceeded or were below the median values

in both categories were not included in the analysis. A summary of the data on each group is presented in Table 8.

Table 8

Summary Data on High and Low Experience Groups

Statistic	Group	
	High	Low
Number	30	35
Mean FCS Score	71.5	71.8
Variance	86.1	75.0

A t-test on differences between means was used to test the hypothesis. A t-value of .12 was computed, which was not significant at the .05 level, and the hypothesis was not rejected.

The purpose of the investigation of the latter five hypotheses was to determine the relationship of characteristics descriptive of the community and teaching staff with the FCS total score. In each analysis the results provided evidence supportive of the hypotheses. It was concluded that no significant influence on the FCS total score could be attributed to these characteristics.

Personal characteristics of the principal and their relationship to the FCS total score were examined through the following hypothesis:

H_9: Variables descriptive of a principal's age, highest degree earned, and number of years of administrative experience are directly related to the FCS score.

The ages of the principals participating in the study ranged from 27 to 63 years old, with a mean value of 44.6 years and a median

of 44. The test of significance used to examine the relationship between these data and the FCS total scores was a product-moment correlation. The coefficient computed was .26. This was significant at the .05 level for an n of 90.

The data gathered on the principal's highest degree earned failed to produce a distribution appropriate for testing. Only four of the principals reported bachelor's or doctorate degrees, while 72.2% held master's degrees.

The final variable supplied by building principals was that of the number of years of administrative experience they had amassed. The relationship of this variable to the FCS score was analyzed through the use of a product-moment correlation. The computed coefficient was .31, significant at the .05 level. This value provided evidence of a direct relationship between the cooperation score and the principal's number of years of administrative experience.

The relationships between the FCS total score and teacher perceptions of the principal's skills, knowledge, attitudes and behavior were tested through the use of the following hypothesis:

H_{10}: The FCS score is directly related to the principal's image, as derived from the 23 items on the Administrator Image Questionnaire.

AIQ data available from the R.E.D.E. Center was only complete for 61 of the 90 principals who participated. The results of the product-moment correlations between the FCS total and the 23 AIQ items are summarized in Table 9. For each of these tests the critical value at the .05 level of significance was .250.

Table 9

Coefficients of Correlation for Relationships Between FCS Total Scores and Teacher Ratings on 23 AIQ Items

(n = 61)

	Item	r
1.	Verbal fluency	.19
2.	Consideration of others	.28
3.	Attitude towards job	.09
4.	Technical competence	.26
5.	Achievement drive	-.01
6.	Supportiveness	.26
7.	Flexibility	.25
8.	Performance under stress	.17
9.	Openness	.27
10.	Encouragement of staff participation	.29
11.	Ability to delegate responsibility	.14
12.	Innovativeness	.15
13.	Success in communicating expectations	.06
14.	Fairness	.22
15.	Maintenance of staff morale	.23
16.	Sense of humor	.36
17.	Decision-making ability	.14
18.	Evaluating ability	.13
19.	Managerial skill	.12
20.	Awareness	.21
21.	Self-control	.14
22.	Leadership skill	.21
23.	Appearance	.18
24.	Average rating for items 1 - 23	.23

Seven AIQ items produced coefficients with significance at the .05 level. The seven, and their respective coefficients were as follows: (1) consideration of others, .28, (2) technical competence, .26, (3) supportiveness, .26, (4) flexibility, .25, (5) openness, .27, (6) staff participation, .29, and (7) sense of humor, .36.

Testing of the relationships between the FCS total score and the principal's employee-centered and organizational-centered images followed from the tests conducted on hypothesis H_{10}. The specific hypotheses under consideration in this treatment were as follows:

H_{11}: The 10 elements comprising a principal's employee-centered image are directly related to the FCS score obtained on his teaching staff.

H_{12}: There is no significant relationship between the FCS score and the 13 elements comprising a principal's organizational-centered image.

The tests of these hypotheses were derived from grouping the results shown in Table 9, according to the elements comprising the two images, as defined in Chapter II. Table 10 shows the groupings and their respective product-moment coefficients of correlation with the FCS score.

Inspection of Table 10 revealed notable differences in the coefficients reported for the two images. Eighty percent of the employee-centered image items obtained coefficients above .20, with five significant at the .05 level, while only three items, 23%, achieved a coefficient as high as .20 for the organizational-centered image. Of these latter three, only technical competence and flexibility were significant at the .05 level.

Table 10

Coefficients of Correlation for Relationships Between the FCS Scores and Elements Comprising Employee-Centered and Organizational-Centered Images

(n = 61)

Component of Image	r
Employee-centered image	
1. Consideration of others	.28*
2. Supportiveness	.26*
3. Openness	.27*
4. Encouragement of staff participation	.29*
5. Innovativeness	.15
6. Fairness	.22
7. Maintenance of staff morale	.23
8. Sense of humor	.36*
9. Awareness	.21
10. Appearance	.18
Organizational-centered image	
1. Verbal fluency	.19
2. Attitude towards job	.09
3. Technical competence	.26*
4. Achievement drive	-.01
5. Flexibility	.25*
6. Performance under stress	.17
7. Ability to delegate responsibility	.14
8. Success in communicating expectations	.06
9. Decision-making ability	.14
10. Evaluating ability	.13
11. Managerial skill	.12
12. Self-control	.14
13. Leadership skill	.21

*Significant at the .05 level

While notable differences between the two images were discerned, elements comprising them failed to gain the statistical significance for acceptance of H_{11} or rejection of H_{12}.

Summary

The data presented in this chapter were organized to report the analyses performed in investigating the reliability and validity of the Faculty Cooperation Scale (FCS), and the relationship between characteristics of the 91 principals who participated and the resulting FCS totals obtained. In conducting the analyses the following statistical models were utilized: Pearson product-moment, Spearman rank-order, and point-biserial correlations, t-ratios, and two-factor analysis of variance. In each test critical values were determined for the .05 level of significance.

Tests on the reliability of the instrument were conducted through the use of a 2002 cell two-factor analysis of variance. The resulting coefficient of reliability reported was .92.

Validity of the instrument was tested by correlating the number of grievances and reprimands filed in one school year, and an uncooperativeness factor with the total score derived from the FCS instrument. These tests provided evidence supporting the validity of the instrument. Additional support was provided through correlations between individual items on the instrument and the total score obtained from summing the weighted responses to each item. Independent ratings by central office administrators showed no significant agreement with those of respective building principals, and failed to provide evidence of validity.

Tests of relationship between the total FCS score and characteristics of the community in which the school buildings were located, and of the teaching staff proved negative, as predicted.

Nine characteristics descriptive of building principals were found to be significantly related to the FCS score at the .05 level.

Examination of teacher perceptions of the principal's employee-centered and organizational-centered images suggested a relationship of the former with the cooperation score, but tests proved negative at the .05 level of significance.

The conclusions drawn from the analyses of these data, and recommendations for further study and use will be presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Introduction

The primary purpose of this study was to investigate the relationship between variables descriptive of building principals and the level of cooperation gained from teachers. A secondary purpose was to design an instrument capable of discriminating between levels of teacher cooperation, and through analyses of the data derived from a field test, conduct tests of the instrument's reliability and validity. Presented in this chapter are a summary of the procedures used to obtain these objectives, conclusions drawn from the analyses of the data, and the implications of the findings for further use.

Summary

Researchers in the field of educational administration have conducted studies on various aspects relating to the effectiveness of the administrator in achieving the goals and objectives of his institution. Resulting from these studies has been the development of models which provide for the study and training of administrators in becoming more successful leaders. The majority of these models satisfy the need for the cooperation of the individuals being lead but each researcher has failed to investigate, specifically, the nature of the influences which are associated with the level of cooperation. It was the purpose of this study to identify factors which related, specifically, to the level of teacher cooperation, as it existed in the sample investigated.

The literature revealed little on which a study of cooperation could be based. A review of research did provide evidence that the climate within an organization was determined primarily by the individual supplying the leadership and that perceptions of the leader, whether accurate or not, served to determine the effectiveness and efficiency of the cooperative effort. Those studies which dealt with the topic of cooperation proposed that it was determined by a complex array of factors, each of which was controlled or influenced by the leader.

Identification of related factors was preceded by a delineation of a definition, in theoretical terms, of the concept of cooperation. For purposes of this study the definition adopted was: The willingness of an individual or group of individuals to contribute their talents, energies and support for the completion of a task or attainment of a goal specified by the group or person of authority. This was then translated into operational terms descriptive of the role assumed by a teacher at the elementary school level. This particular level was chosen due to the availability of subjects for study.

An instrument, called the Faculty Cooperation Scale, was constructed utilizing the dimensions of cooperation delineated in the operational definition. It was intended that the elementary building principal would rate his teaching staff on each of the 22 items included, according to a four-choice weighted response. The sum of the weighted responses served as a measure of the level of cooperation existing. The instrument and a data sheet were distributed to 108 elementary principals in four midwestern states, and to their immediate

supervisors. Selection of these subjects was made on the criterion of utilization of administrator feedback services offered by the Research, Evaluation, Design, and Experimentation Center of Western Michigan University. The results obtained from 91 of these principals and 11 supervisors were then used to analyze the reliability and validity of the instrument.

The reliability of the instrument was tested through the use of a two-factor analysis of variance technique. Each of the item responses for the 91 principals was used as individual cells in this analysis. The computed coefficient was .92.

Evidence of the validity of the instrument was provided through analyses of the level of "uncooperativeness," represented by the number of grievances and reprimands filed in one school year, and the relationships of each individual FCS item response with the total score derived from the instrument. Tests of agreement between ratings provided by central office administrators and those of respective building principals failed to gain significance, at the .05 level.

Assumptions primary to the hypotheses of the study were that teacher cooperation was dependent on characteristics of the building principal, and that no significant influence was provided by those of the community or teaching staff. Tests of relationships between the cooperation score and the several variables such as: (1) type of community location, (2) socio-economic status, (3) number of teachers in the building, (4) number of male teachers on each teaching staff, (5) average teacher age, and (6) teaching experience were conducted

through the use of Pearson product-moment, Spearman rank-order, and point-biserial correlational models and a t-test on the difference of means.

Similar tests were conducted on characteristics of the building principal utilizing the same statistical models. Variables investigated were: (1) principal's age, (2) highest degree earned, (3) number of years of administrative experience, and (4) teacher perceptions of the principal's skills, attitudes, knowledge, abilities and behavior as represented by responses to the 23 item Administrator Image Questionnaire.

Results of these tests provided evidence on which to draw conclusions regarding the twelve major hypotheses investigated. These conclusions are presented in the following section.

Conclusions

The conclusions drawn regarding the reliability of the Faculty Cooperation Scale, and the twelve major hypotheses investigated which concerned the validity of the instrument and the relationship of certain characteristics to the level of teacher cooperation are presented in summary form. Insofar as the techniques used in this study may be valid, the conclusions that follow may be justified.

Reliability of the instrument

On the basis of the reliability coefficient reported, .92, obtained by calculating the proportion of "true" variance to the total variance produced, it appeared that a relatively small amount of error variance was inherent in the data, and that the FCS instrument

possessed an acceptable measure of reliability for further investigation.

Validity of the measure

The validity of the instrument as a measure of the level of cooperation existing in an elementary school building was investigated through ratings of a lack of cooperation, "known group" ratings of cooperation, and relationships existing between each item on the instrument and the total weighted score derived from the sum of all items. The conclusions drawn were as follows:

1. The number of grievances filed in one school year did not appear to represent a true lack of cooperation as theorized. As a result, no support for the validity of the instrument could be found in the test of relationships between this variable and the measure of cooperation.

2. The number of verbal reprimands made by a principal, indicative of an uncooperative atmosphere, were inversely related to the cooperation score, and appeared to provide substantiation for the capability of the instrument to discriminate between varying levels of cooperation.

3. The lack of a significant relationship between the number of written reprimands made by a principal and the cooperation score appeared to be due to a relatively small distribution of the data. While an inverse relationship was obtained, as predicted, the coefficient of correlation, shown in Table 4, p. 66, lacked sufficient strength to support the validity of the instrument.

4. The "uncooperativeness" factor, consisting of the sum of the weighted responses to the number of grievances and reprimands, was significantly related to the cooperation score, in an inverse manner, and provided evidence of the validity of the instrument.

5. The lack of significant agreement between the ratings provided by building principals and the "known group" ratings of their supervisors failed to provide evidence of the validity of the instrument.

6. The results of the analyses conducted on the relationships existing between each FCS item and the FCS total score appeared to support the validity of the individual items as measuring the same concept. With the exception of item number 10, the coefficients of correlation, shown in Table 5, p. 68, were significant at the .05 level.

7. On the basis of the results obtained, it was concluded that the FCS instrument was a valid measure for discriminating between varying levels of cooperation.

Relationships with certain characteristics

The major hypothesis of this study was that the level of teacher cooperation was directly attributable to characteristics of the building principal. Those which characterized the community and teaching staff were insignificantly related to this level. The conclusions made concerning these characteristics, based on the data analyses, are presented in this section.

1. The results of the data anlayses on the relationships between the FCS scores and the type of community location and socio-economic status provided no evidence of association, and supported the conclusion that these characteristics were not factors which influenced the level of teacher cooperation.

2. Tests of relationship between the FCS score and characteristics of teaching staffs, including number of certified teachers, number of male teachers, and average teacher age, proved negative. These results provided the basis for the conclusion that the cooperation level obtained was not related to these characteristics.

3. Results of the data analysis on the differences in the mean FCS scores for teaching staff possessing percentages above the median values for the sample at the 0 to 3 years teaching experience level and the 11 or more years, shown on page 73, were not significant. Based on these data, the conclusion was drawn that the cooperation level in a school building was not related to the distribution of the teaching staff according to years of teaching experience.

4. The principal's age and number of years of administrative experience were found to be significantly related to the

level of teacher cooperation. This suggests that as the principal gains experience, and grows older, the level of teacher cooperation will improve.

5. Conclusions regarding the relationship between the principal's highest degree earned and the cooperation level could not be treated due to a lack of variability on this dimension. Of the 91 principals, 72.2% possessed master's degrees, while only four indicated educational achievement at either a bachelor's or doctorate level.

6. Analyses of the data on teacher perceptions of the principal's skills, knowledge, attitudes, and behavior, recorded on the Administrator Image Questionnaire, provided evidence of a direct relationship between the FCS score and seven of the AIQ items, at the .05 level of significance. They were as follows:

    a. Consideration of others
    b. Supportiveness
    c. Openness
    d. Encouragement of staff participation
    e. Sense of humor
    f. Technical competence
    g. Flexibility

    A complete listing of all 23 items and their respective coefficients of correlation are found in Table 9, p. 76. On the basis of these findings, it was concluded that the level of teacher cooperation existing within a school building is dependent on teacher perceptions of their principal in these seven areas.

7. The first five characteristics listed in number 6. represented 50% of those items defined in the study as describing a principal's employee-centered image, while only the latter two were included in the 13 characteristics describing the organizational-centered image. These data supported the conclusion that, for the principals studied, elements of the employee-centered image provided a significant influence on the cooperation derived from teachers.

Implications

Authors, such as Likert (1967), Barnard (1938), and Wiles (1963) have made specific reference to the value of cooperative teamwork in achieving organizational goals and objectives. Each has implied that

the extent of an organization's success is dependent on the level at which the members provide a willingness to work together. Barnard (1938), went so far as to say that it was a prime responsibility of the leader to secure the effective processes which maintain cooperation.

In the school setting, the level of attainment of educational goals may be dependent on a number of factors, such as parental support, facilities, quality of the staff. However, without the existence of a cooperative atmosphere the attainment of common purposes may be severely limited.

The results of this study did not merely identify an instrument capable of measuring a dimension of teacher behavior; more importantly, it identified significant relationships between certain characteristics of building principals and the level of cooperation existing within their buildings. These findings are significant not only because there is an apparent lack of research reported on this concept, but because of their implications for further research, the practicing administrator, and those who train administrators. It is the purpose of this section to present these implications.

The results of the study tended to indicate that the instrument developed was capable of discriminating between varying levels of teacher cooperation, and suggested that the size of the community, socio-economic status, or characteristics of the teaching staff were unrelated to the scores obtained. Also, nothing in the data suggested a bias due to regionalism. It would appear that further research attempts in different locales, without regard to characteristics of the community or teaching staff, would produce the same results.

Because of the nature of the operational definition of cooperation utilized in the study, adaption of the instrument for use at the secondary school level could be made quite easily. Results from the use of such a modified form might produce essentially the same results as reported in this study.

Efforts to replicate this research might do well to be concerned with the refinement of the instrument, and to develop it as a suitable diagnostic tool. Use of a refined instrument for this purpose might provide the basis for decisions regarding placement of administrative personnel, identification of potential trouble spots within a school system, or the selection of a particular school building for the placement of experimental educational programs where teacher cooperation would be essential to implementation.

An underlying assumption of the study was that while administrative personnel generally hold a similar desire, i.e., to provide the best possible education for children, there are those who expend needless amounts of time and energy in confrontation with teachers in an attempt to achieve goals without teacher support. Such expenditures of these critical commodities contribute to the inefficiency of school systems, the wasting of public tax money, and the deprivation of opportunity for students to receive an education in optimum fashion. One of the implications of these findings for practicing administrators may be that, through the use of the behavioral statements included in the instrument developed, an estimation of the cooperative level existing could be made. If a level of cooperation is found to exist which does not promote the attainment of goals in an optimum fashion,

the principal might find that self inspection relative to the characteristics identified in the study would reveal certain deficiencies. The sincere administrator would then attempt to make improvements in areas identified as potentially hindering teacher cooperation rather than just attributing the lack of it to teacher unionism.

The most significant number of administrator characteristics related to cooperation found identification with human relations skills. While the administrator may believe that he possesses competence in these skills, it is the perception by teachers of the related attitudes and behaviors which determine the cooperation provided, and he must be sensitive to these perceptions. Efforts directed toward improvement of these skills may result in changes in teacher perceptions, and correspondingly, the level of cooperative effort provided.

Beyond making attempts to become more knowledgeable and adjusting attitudes and behaviors the administrator may not be able to significantly adjust perceptions. Such variables as age and experience or maturity can not be immediately influenced. Other variables identified appear to be related to basic personality traits and philosophical outlooks which may also be difficult to change. Examples would include the ability to adjust to varying situations, the consideration of divergent views, patience, understanding, consideration, and being courteous. The implication of these findings may be of greater significance to boards of education who hire administrative personnel. If teacher cooperation is a priority goal, then they must attempt to secure personnel possessing the characteristics necessary to achieve

it, or those who are willing to make necessary adjustments through additional training.

The findings of this study also have implications for the institutions responsible for the preparation and inservice training of administrators. If cooperation between teachers and administrators is a desired goal, then institutions must accept the responsibility for assuring that their programs produce technically competent leaders, who are well versed in human relations skills.

This might also imply that criteria used for admittance to graduate level programs in educational administration need to be altered to provide a screening process for those individuals who do not possess the basic personality traits conducive to the promotion of teacher cooperation.

Finally, it should be noted that while certain characteristics of building principals have been identified as being related to teacher cooperation, there may be other factors which provide a significant influence and warrant further investigation.

REFERENCES

Amara, Roy C. Some features of the world of 1994. The Futurist, 1974, 8(3), 129-30.

Barnard, Chester I. Functions of the executive. Cambridge, Massachusetts: Harvard University Press, 1938.

Blake, R.R., and Mouton, J.S. The managerial grid. Houston, Texas: Gulf Publishing, 1964.

Boles, Harold W. Leaders, leading and leadership: A theory. Unpublished manuscript, Western Michigan University, 1970.

Booker, Gene V. Perception of administrative behavior. A lecture at Western Michigan University, May 9, 1974.

Bootsma, Kenneth B. A study of the use of subordinate feedback in changing manager image. Unpublished doctoral dissertation, Western Michigan University, 1972.

Brown, Alan F. Reactions to leadership. Educational Administration Quarterly, 1967, 3(1), 62-73.

Caldwell, William E., and Spaulding, H.Dale. The effect of the senior high school principal's rule administration behavior on staff militancy and leadership perception. Paper presented at the 58th Annual Meeting of the American Educational Research Association, New Orleans, February 25, 1973.

Costello, T.W. and Zalkind S.S. Psychology in administration. Englewood Cliffs, New Jersey: Prentice-Hall, 1963, as found in Bootsma, 1973.

Courtis, Stuart A. Cooperation principles and practices. Washington: Department of Supervisors and Directors of Instruction of the National Education Association, 1938, as found in Melchior, 1950.

Edgecombe, William David. The interrelationships between certain personality factors of the elementary school principal, his interpersonal perception, and the morale of his faculty. Unpublished doctoral dissertation, Case Western Reserve University, 1968.

Eye, Netzer, and Krey. Supervision of instruction. New York: Harper & Row, 1971.

Getzels, Lipham, and Campbell. Educational administration as a social process. New York: Harper & Row, 1968.

Glass, Gene V. and Stanley, Julian C. Statistical methods in education and psychology. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Good, Carter V. Dictionary of education. (3rd ed.) New York: McGraw-Hill, 1973.

Graff, Orin B. and Street, Calvin M. Improving competencies in educational administration. New York: Harper & Row, 1956.

Gunderson, Doris U. Flaws in research design. Speech presented at the Annual Meeting of the National Reading Conference, St. Petersburg, Florida, December 2, 1966.

Halpin, Andrew W. The behavior of leaders. In Heald, Romard, and Georgiady (Eds.), Selected readings on general supervision. New York: Macmillan, 1970.

_____. The leadership behavior of school superintendents. Columbus, Ohio: The School-Community Development Study Monograph Series, No. 4, College of Education, Ohio State University, 1956, as found in Wilson, 1969.

Halpin, Andrew W., and Croft, Donald B. The organizational climate of schools. Columbus, Ohio: Ohio State University Research Foundation, 1962.

Hansen, Robert L. An investigation of selected variables related to the rating of school administrator effectiveness. Unpublished doctoral dissertation, Western Michigan University, 1971.

Harris, Ben M. Supervisory behavior in education. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

Hemphill, Griffiths and Frederickson. Administrative performance and personality. New York: Bureau of Publications, Teachers College, Columbia University, 1962, as found in Wilson, 1969.

Hollander, Edwin P., and Weisenthal, David L. Compliance as a function of confirmation or disconfirmation of an expected monetary reward. Proceedings of the 77th Annual Convention of the American Psychological Association, Washington, 1969.

Kahn, Robert L. and Katz, Daniel. Leadership practices in relation to productivity and morale. In Cartwright and Zander (Eds.), Group dynamics. (2nd ed.) Evanston, Illinois: Row Peterson, 1960, as found in Wilson, 1969.

Kepner, Charles H., and Tregoe, Benjamin B. The rational manager. New York: McGraw-Hill, 1965.

Kerlinger, Fred N. Foundations of behavioral research. 2nd ed. New York: Holt, Rinehart and Winston, 1973.

Kimbrough, Ralph B. The behavioral characteristics of effective educational administrators. Educational Administration and Supervision, 1959, 45(6), 337-348.

Koplyay, Janos, and Mathis, B. Claude. The relationship between teacher morale and organizational climate. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February 16, 1947.

Likert, Rensis. The human organization: Its management and value. New York: McGraw-Hill, 1967.

Lucio, William H. and McNeil, John D. Supervision: A synthesis of thought and action. New York: McGraw-Hill, 1969.

Lutz, Frank, and McDaniel, John A. The effect of the elementary school principal's rule administration on staff militancy and leadership behavior. Paper presented at the 58th Annual Meeting of the American Educational Research Association, New Orleans, February 25, 1973.

Maslow, Abraham H. Motivation and personality. New York: Harper & Row, 1970.

Maxwell, Gerald, et al. Cooperation and interpersonal risk. Journal of Personality and Social Psychology, 1971, 18(2), 9-32.

Melchior, William T. Instructional supervision. Boston: D.C. Heath, 1950.

Morphet, Edgar, et al. Educational administration. Englewood Cliffs, New Jersey: Prentice-Hall, 1959.

Pfiffner, John M. The effective supervisor: An organizational research study. In L. Craig Wilson, et al., Sociology of supervision. Boston: Allyn and Bacon, 1969.

Reddin, W.J. The 3-D management style theory. Training and Development Journal, 1967, 21(2), 8-17.

Regan, Dennis Thomas. The effects of a favor and liking on compliance. Unpublished doctoral dissertation, Stanford University, 1968.

Rekosh, Jerold H., and Feigenbaum, Kenneth D. The necessity of mutual trust for cooperative behavior in a two-person game. Journal of Social Psychology, 1966, 69.

Shane, Harold G. The educational significance of the future. Bloomington, Indiana: Phi Delta Kappa, 1973.

Siegel, Sidney. Nonparametric statistics. New York: McGraw-Hill, 1956.

Simon, Herbert A. Administrative behavior. New York: Macmillan, 1970.

Toffler, Alvin. Learning for tommorrow. New York: Random House, 1972.

Wiles, Kimball. Supervision for better schools. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

Williams, Stanley W. New dimensions in supervision. Scranton, Pennsylvania: Intext, 1972.

Wilson, Byar, Shapiro, and Schell. Sociology of supervision. Boston: Allyn and Bacon, 1969.

APPENDICES

APPENDIX A

Faculty Cooperation Scale and Data Sheet

FACULTY COOPERATION SCALE

Building: _____

Directions:

The items in this questionnaire describe the behaviors that occur within an elementary-school organization. Please indicate to what extent each of these descriptions characterize the teaching staff of this building. Read each item carefully and respond in terms of how well the statement describes the staff by placing a check-mark in the appropriate blank.

After completing all items please return in the envelope provided.

		Rarely Occurs	Sometimes Occurs	Often Occurs	Frequently Occurs
1.	Teachers work as a team in achieving school goals.	_____	_____	_____	_____
2.	Teachers perform tasks willingly.	_____	_____	_____	_____
3.	Teachers comply with the principal's requests promptly.	_____	_____	_____	_____
4.	Teachers seek solutions, or desired outcomes, in a friendly, informal, non-aggressive manner.	_____	_____	_____	_____
5.	Teacher involvement in or support of union activities hinders school operation.	_____	_____	_____	_____
6.	The legitimacy of teacher absenteeism is doubted.	_____	_____	_____	_____
7.	Teachers submit complaints and grievances which are petty in nature.	_____	_____	_____	_____

	Rarely Occurs	Sometimes Occurs	Often Occurs	Frequently Occurs
8. Teachers demonstrate supportive relationships with the total administration.	____	____	____	____
9. Teachers accept change willingly.	____	____	____	____
10. Teachers refer to the master contract in dealing with administrative requests or directives.	____	____	____	____
11. Teachers approach staff meetings with a "let's get things done" attitude.	____	____	____	____
12. Teachers prepare for and attend parent-school meetings with a minimum of prompting.	____	____	____	____
13. Teachers accept committee assignments enthusiastically	____	____	____	____
14. Teachers display an identification with school goals.	____	____	____	____
15. Teachers willingly accept extra-duty assignments.	____	____	____	____
16. New projects or methods are received by teachers positively.	____	____	____	____
17. Teachers perceive criticism and evaluation as threatening.	____	____	____	____

	Rarely Occurs	Sometimes Occurs	Often Occurs	Frequently Occurs
18. Teachers anticipate and provide assistance in situations requiring adult supervision.				
19. Teachers deal with classroom discipline problems themselves.				
20. Records and reports are completed by teachers promptly, accurately, and according to directions.				
21. Teachers demonstrate a knowledge and understanding of the roles of each person in the building.				
22. Teachers cooperate with the principal in completing the tasks of school operation.				

DATA SHEET

Principal's name _____

Building name _____

Street address _____

City, state, and ZIP _____

PRINCIPAL:

Age _____ Highest degree earned _____

Number of years of administrative experience _____

TEACHERS:

Number of certified teachers in building _____ Average age _____

Number of male teachers on the staff _____

Approximately what percentage of this staff has been teaching for a period of

0-3 years? _____ 4-10? _____ 11 or more? _____

(For the following, check the most appropriate response.)

Total number of grievances submitted by teachers this year

_____ none; _____ 1 to 4; _____ 5 to 9; _____ 10 or more.

Total number of private conferences with teachers this year involving a reprimand

_____ none; _____ 1 to 4; _____ 5 to 9; _____ 10 or more.

Total number of written reprimands you have had to make this year

_____ none; _____ 1 to 2; _____ 3 to 4; _____ 5 or more.

COMMUNITY:

Socio-economic status of the community

_____ low; _____ average; _____ high.

Type of location

_____ rural; _____ urban.

APPENDIX B

Administrator Image Questionnaire and Administrator Image Profile

ADMINISTRATOR IMAGE QUESTIONNAIRE

Please respond to the following questions honestly and frankly. Do not give your name. All responses are anonymous. Neither the administrator about whom these questions are asked nor anyone else will ever be able to associate your responses with you.

Immediately after completion, your responses, along with responses of others from your group, will be sent to Western Michigan University for analysis. Image profiles representing how your administrator is perceived along several dimensions by your group will then be sent to him. The profile is sent to no one else unless so requested by your administrator.

Fill in the blank which represents your reaction to each question. Be sure to fill in only one blank for each question. If you change an answer be sure to erase thoroughly the incorrect mark. PLEASE USE LEAD PENCIL.

WHAT IS YOUR OPINION CONCERNING THIS ADMINISTRATOR'S:

	POOR	FAIR	AVG.	GOOD	EXC.
1. VERBAL FLUENCY: (Does he express his ideas smoothly? Is he articulate?)	___	___	___	___	___
2. CONSIDERATION OF OTHERS: (Is he patient, understanding, considerate and courteous?)	___	___	___	___	___
3. ATTITUDE TOWARD HIS JOB: (Does he show interest and enthusiasm toward his work?)	___	___	___	___	___
4. TECHNICAL COMPETENCE: (Does he have a thorough knowledge and understanding of his field?)	___	___	___	___	___
5. ACHIEVEMENT DRIVE: (Does he have the initiative and persistence needed to accomplish meaningful goals?)	___	___	___	___	___
6. SUPPORTIVENESS: (Does he support those responsible to him?)	___	___	___	___	___

ADMINISTRATOR IMAGE QUESTIONNAIRE--Continued

	POOR	FAIR	AVG.	GOOD	EXC.
7. FLEXIBILITY: (Is he able to adjust rapidly to changes in plans or procedures?)	___	___	___	___	___
8. PERFORMANCE UNDER STRESS: (How does he function under pressure?)	___	___	___	___	___
9. OPENNESS: (Does he consider divergent views?)	___	___	___	___	___
10. ENCOURAGEMENT OF STAFF PARTICIPATION: (Does he encourage you to raise questions and express opinions?)	___	___	___	___	___
11. ABILITY TO DELEGATE RESPONSIBILITY: (Does he assign tasks to personnel capable of carrying them out?)	___	___	___	___	___
12. INNOVATIVENESS: (Is he willing to try new approaches or methods?)	___	___	___	___	___
13. SUCCESS IN COMMUNICATING EXPECTATIONS: (Does he clearly define and explain what is expected of staff members?)	___	___	___	___	___
14. FAIRNESS: (Does he treat staff members in an unbiased and impartial manner?)	___	___	___	___	___
15. MAINTENANCE OF STAFF MORALE: (Does he create a feeling of unity and enthusiasm among those in contact with him?	___	___	___	___	___
16. SENSE OF HUMOR: (Does he have a sense of the ridiculous? Does he laugh at his own mistakes?)	___	___	___	___	___

ADMINISTRATOR IMAGE QUESTIONNAIRE--Continued

	POOR	FAIR	AVG.	GOOD	EXC.
17. DECISION-MAKING ABILITY: (Does the evidence indicate that he is able to make constructive decisions?)	___	___	___	___	___
18. EVALUATING ABILITY: (To what extent does he objectively evaluate programs and practices?)	___	___	___	___	___
19. MANAGERIAL SKILL: (Does he coordinate the efforts of those responsible to him so that the organization operates at peak efficiency?)	___	___	___	___	___
20. AWARENESS: (To what extent is he conscious of the problems that exist on your level?)	___	___	___	___	___
21. SELF-CONTROL: (Does he maintain control of his emotions when things are not going right?)	___	___	___	___	___
22. LEADERSHIP SKILL: (Does his leadership result in the attainment of mutually acceptable goals?)	___	___	___	___	___
23. APPEARANCE: (Are his grooming and attire in good taste?)	___	___	___	___	___

24. IF YOU WISH, PLEASE LIST ONE OR MORE WEAKNESSES OF THIS ADMINISTRATOR:

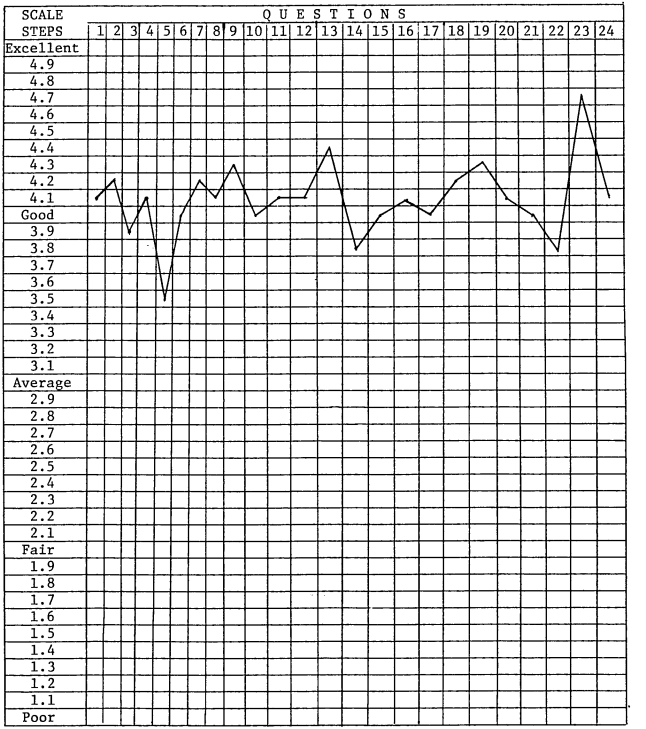
25. IF YOU WISH, PLEASE LIST ONE OR MORE STRENGTHS OF THIS ADMINISTRATOR:

Prepared by: R.E.D.E. Center
Western Michigan University
Kalamazoo, Michigan 49001

ADMINISTRATOR IMAGE PROFILE

Administrator: Sample No. _____ Date: _____

Group A: _____ Group B: _____



ADMINISTRATOR IMAGE PROFILE--Continued

KEY TO QUESTIONS

1. Verbal Fluency
2. Attitude Toward Teachers
3. Attitude Toward Job
4. Technical Competence
5. Achievement Drive
6. Supportiveness
7. Adaptability
8. Flexibility
9. Performance under Stress
10. Openness
11. Staff Participation
12. Delegate Responsibility
13. Innovativeness
14. Communicating
15. Fairness
16. Staff Morale
17. Sense of Humor
18. Decision-Making
19. Evaluating Ability
20. Administrative Skill
21. Awareness
22. Self-Control
23. Appearance
24. Average items 1-23

Prepared by: R.E.D.E. Center
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APPENDIX C

Associate Dean's Letter of Request, Letter of Request to Principals, and Letter of Request to Central Office Administrators

WESTERN MICHIGAN UNIVERSITY
COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN
49008

May 16, 1975

Dear Fellow Administrator:

Enclosed you will find a request for assistance on a doctoral study by one of our graduate students.

The topic is one of interest and could provide significant findings for the field of education. I hope that you will take the opportunity to participate.

I can assure you that the integrity and reputation of the College of Education, its departments and support centers will be maintained throughout the course of this study, and that your response will be held in the strictest confidence.

Sincerely,

Kenneth F. Simon
Associate Dean

WESTERN MICHIGAN UNIVERSITY
COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN
49008

May 16, 1975

Dear Fellow Educator:

I am writing to ask for your assistance in completing a dissertation study on the concept of teacher "cooperation." Involvement will require just a few minutes of your time, yet your input could contribute significantly to a field where little, if any, research has been reported.

The purpose of the study is to determine what factors are associated with various levels of teacher "cooperation" in the elementary school organization.

You will find enclosed a data sheet regarding yourself, the teaching staff, and your community, and a twenty-two item Faculty Cooperation Scale, designed to assess the level of cooperation of your staff. I will be most appreciative of your assistance in completing these items and returning them in the envelope provided.

All responses will be held in strictest confidence and absolutely no names will be used in reporting the results. All participants will receive a summary of the findings of the study near the opening of school next fall.

The sample included in the study represents ninety-one elementary principals from five states in the Midwest. Each was selected on the basis of utilization of the WMU Educator Feedback Center services, and size of school system and community.

To assure statistical significance of the study it is hoped that you and the ninety other principals will provide the few minutes required to participate.

Thank you in advance for your help.

Respectfully,

Stanley R. Bushouse

WESTERN MICHIGAN UNIVERSITY
COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN
49008

May 16, 1975

Dear Fellow Educator:

I am writing to ask for your assistance in completing a dissertation study on the concept of teacher "cooperation." Involvement will require just a few minutes of your time, yet your input could contribute significantly to a field where little, if any, research has been reported.

The purpose of the study is to determine what factors are associated with various levels of teacher "cooperation" in the elementary school organization.

Your participation would involve providing an outside view of the cooperation level existing in each of your elementary buildings. This will be in conjunction with that of elementary principals in your system whom I will be contacting individually.

You will find enclosed one copy of the Faculty Cooperation Scale, designed to assess the level of teacher "cooperation" in the elementary school, and sufficient response forms for your perception of each building on the twenty-two questionnaire items. I will be most appreciative of your assistance in completing these items and returning them in the envelope provided. All responses will be held in strictest confidence and absolutely no names will be used in reporting the results. Participants will receive a summary of the findings of the study near the opening of school next fall.

The sample included in the study represents ninety-one elementary principals, in fourteen school districts, located in five midwestern states. Each was selected on the basis of utilization of the WMU Educator Feedback Center services, size of school system and community.

To assure statistical significance of the study it is hoped that you and the other thirteen central office administrators will provide the few minutes required to participate.

Respectfully,

Stanley R. Bushouse

APPENDIX D

Follow-up Letter to Principals and Follow-up
Letter to Central Office Administrators

WESTERN MICHIGAN UNIVERSITY
COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN
49008

June 2, 1975

Recently you received a request from me for assistance in completing a doctoral study involving "teacher cooperation."

My records indicate that I have not as yet received a response from you and I would hope that it is only because you have not had the time to get to it.

Thus far, fifty-four of your colleagues have responded, representing a 56% return. Your response will assist in increasing this number and in producing a greater significance of the findings for all of education.

I have included an additional set of the instruments in the event that you might be in need of them. If your response is already in the mail, please accept my sincere thanks.

I will be looking forward to your reply. Thank you in advance for your cooperation.

Respectfully,

Stanley R. Bushouse

WESTERN MICHIGAN UNIVERSITY
COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN
49008

June 4, 1975

Recently you received a request from me for assistance in completing a doctoral study involving "teacher cooperation."

My records indicate that I have not as yet received a response from you and I would hope that it is only because you have not had the time to get to it.

Thus far, ten of your elementary principals have responded, representing a 71% return. Your response will provide the essential independent perceptions of teacher cooperation necessary for the significance of the study.

I have included an additional set of the instruments in the event that you might be in need of them. If your response is already in the mail, please accept my sincere thanks.

I will be looking forward to your reply. Thank you in advance for your cooperation.

Respectfully,

Stanley R. Bushouse