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ABSTRACT

This paper discusses results of multiple regression analysis and prediction of certain perceived leader behaviors given measures of organizational characteristics. The "Profile of a School" was used with the Leader Behavior Description Questionnaire, Form XII. Results indicate that significant proportions of variance in leader behavior subscales are accounted for by particular organizational processes. Conclusions regarding leader behavior can be made from measures of organizational characteristics. These results support the assumption that leader behavior and organizational processes are interrelated. The operational properties of the measures used provide information for generating research and developing organizational change strategies. (Appendix C may reproduce poorly.) (Author/ILR)

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AN ANALYSIS OF RELATIONSHIPS BETWEEN PERCEIVED LEADER  
BEHAVIOR OF ELEMENTARY SCHOOL PRINCIPALS AND  
ORGANIZATIONAL PROCESSES OF SCHOOLS,<sup>1</sup>

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## Introduction

Modern organization theory (Likert, 1967) suggests that leadership is a causal variable in determining organization processes or organizational characteristics. Research from the private sector indicates that certain configurations of organizational characteristics - particularly leader behaviors - are related to organizational productivity (Marrow, Bowers, & Seashore, 1967). If the assumption that school organizations are more like those of business and industry is correct, then there should be predictable relationships between school building leadership and organizational processes. Despite the lack of generally agreed upon criteria for measuring educational productivity, acceptance of the basic assumption regarding schools as organizations has implications for studying and understanding the effects of leadership on educational output. Lacking adequate measures of productivity the relationship between elementary principal leadership style and organizational characteristics of schools was examined.

## Theory and Rationale

Theory and research emanating from the social and behavioral sciences, especially social psychology, support the position that the concomitant fulfillment of individual needs and organizational goals results in a healthy and productive organization. An example of this theoretical position is postulated by Bakke. The "fusion process" is defined by Bakke (1953) as:

...the simultaneous operation of the socializing process by which the organization seeks to make an agent of the individual for the achievement of organizational objectives, and of the personalizing process by which the individual seeks to make an agency of the organization for the achievement of his personal objectives. It is this simultaneous attempt of the organization to make over the individual in its own image, and of the individual to make over the organization in his own image. It is a process in the course of which both the organization and the individual are modified. (p.5)

The fusion process provides a multi-dimensional frame of reference for viewing organizational processes. This is consistent with social systems theory and reflects the trend of modern organization theory to view the system as a whole rather than as a configuration of separate entities (Getzels, Lipham, & Campbell, 1968). Further explication of this position is expressed by Argyris' (1964) "integrative" principle and "Theory Y" of McGregor (1960).

More recent theory emanating from research on organizational behavior posits that the nature of interpersonal interaction is critical in determining how well the organization is able to meet individual needs (Katz, 1964; Presthus, 1958). Developmental psychology provides insights into a more precise description of what individual needs are involved (Maslow, 1962). Argyris (1957) describes seven specific adult needs of individuals as follows:

The human being in our culture: (1) tends to develop from a state of being passive as an infant to a state of increasing activity as an adult... (2) tends to develop from a state of dependence upon others as an infant to a state of relative independence as an adult... (3) tends to develop from being incapable of

behaving in only a few ways as an infant to being capable of behaving in many different ways as an adult. (4) Tends to develop from having erratic, casual, shallow, quickly dropped interests as an infant to possessing a deepening of interests as an adult... (5) tends to develop from having a short-time perspective... as an infant to having a much longer time perspective as an adult... (6) tends to develop from being in a subordinate position in the family and society as an infant to aspiring to occupy at least an equal and/or superordinate position relative to his peers. (7) Tends to develop from having a lack of awareness of the self as an infant to having an awareness of and control over the self as an adult... (pp. 3-4)

Research supports the viewpoint that where leadership facilitates meaningful interpersonal interaction, productivity and job satisfaction increase. In studies of railroad workers and office personnel, leadership style was related to productivity (Katz & Morse, 1950; Katz, et al., 1951). Similarly, the Hersberg Study (Hersberg, Mauser, & Snyderman, 1957) supports the view that job satisfaction is related to interpersonal climate.

#### Major Questions

The relationship between organizational behavior in schools and leadership was investigated in this study. Based upon knowledge and theory reconstructed from research in the private sector, it is hypothesized that there are significant relationships and that those relationships which promote interpersonal interaction and fulfillment of adult individual needs will be accompanied by specific organizational processes and leadership behaviors. The major questions examined are: (a) Are organizational processes of school organizations related to the leader

behavior of principals?, and (b) What is the strength of the relationship between specific organizational dimensions and particular leader behaviors?\*

### Instrumentation

Leader Behavior -- Leader behavior or style is that behavior measured by the Leader Behavior Description Questionnaire -- Form XII (LBDQ XII). This behavior is reported by teachers and consists of twelve dimensions or subscales. These are defined (Stogdill, 1963, p.3):

- 1) Representation -- Representative leaders speak and act as spokesmen for subordinates.
- 2) Demand Reconciliation -- Demand reconciling leaders bring conflicting demands into accord and reduce disorder.
- 3) Tolerance of Uncertainty -- Leaders who are tolerant of uncertainty are able to accept indefinite situations and postpone action without anxiety or upset.
- 4) Persuasiveness -- Persuasive leaders are convincing, use arguments effectively, and exhibit strong convictions.
- 5) Initiation of Structure -- Leaders who initiate structure clearly define their own roles and inform subordinates of what is expected of them.
- 6) Tolerance of Freedom -- Leaders who are tolerant of freedom allow subordinates to exercise initiative, make decisions, and take action.

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\*The basis of this study was Fred C. Feitler's dissertation, "A Study of Relationships Between Principal Leadership Styles and Organizational Characteristics of Elementary Schools," Syracuse University, 1970.

- 7) Role Assumption -- Role-assuming leaders actively exercise the leadership role rather than surrendering leadership to others.
- 8) Consideration -- Considerate leaders regard the comfort, well-being status, and contributions of their subordinates.
- 9) Production Emphasis -- Production emphasizing leaders apply pressure for increased output.
- 10) Predictive Accuracy -- Leaders who are accurate in prediction have the ability to concretely anticipate outcomes.
- 11) Integration -- Integrative leaders maintain closely knit organizations and resolve inter-member conflicts.
- 12) Superior Orientation -- Superior-oriented leaders maintain cordial relations with superiors, have influence with superiors, and strive for higher status.

The Leader Behavior Description Questionnaire, Form XII, is in its fourth revision and has been used with military, governmental, business, labor, university, community, and school leaders. Although it does not measure all ramifications of leader behavior, it does cover a wider range of behavior than its predecessor, the LBDQ II. The so-called LBDQ II is well known, with numerous published studies attesting to its usefulness.

According to Stogdill (1963), its developer:

It can be used to describe the behavior of ... leaders in any type of group or organization, provided the followers have had an opportunity to observe the leader in action as a leader of the group (or organization). (p. 1)

#### Profile of a School - Form "T"

The Profile of a School - Form "T" is a thirty item questionnaire developed from a fifty-one item parallel form developed for use in

business and industry by Rensis Likert (1967) and a thirty-two item school form authored by Jane and Rensis Likert. The form used in this study describes processes found in the industrial form with the simpler format of the Likert school form. The processes described and the profile generated from the item means provide a composite picture or typology of the organization of a school.

The original organizational profile developed by Likert for the private sector has been extensively used in business and industry (Likert, 1967). The results of these studies provide a measure of the reliability and validity of this instrument. Organizational development activity described by Likert and measurement of organizational change provide further evidence to substantiate the construct validity of the industrial form (Marrow, Bowers, & Seashore, 1957).

The school forms, both that developed by Likert and the version used in this study, give strong indication that they are similar to the industrial questionnaire. In a study by Feltler and Blumberg (1971), using the Likert form in an organizational development project in a large urban elementary school, the ability of the instrument to discriminate change in the organization was validated. Further research, with the adaptation used in this study, also supports the construct validity of the instrument (Feltler, 1968).

The construct validity of the dimensions of the Profile of a School were factor analytically tested. The principal axis solution indicated that there were five primary factors measured by the Profile instrument.



Inspection of these five factors indicated that these five factors were descriptive of a central construct, "organizational environment." Content analysis indicated that this construct was descriptive of the interpersonal and group processes or behaviors characterizing the organization. Varimax rotation of the five principal axis factors was performed yielding the following five factors (Feitler, 1970):

Superior-Oriented Dimension - Factor 1 reflects the nature of the interpersonal environment derived from the behavior of the principal. Factor 1 was called "Superior Oriented" processes or the Superior-Oriented dimension, since it includes elements of both leadership and supervisory processes.

Task-Cooperation Dimension - Factor 2 describes the quality and amount of cooperation operating in the school, particularly as it relates to tasks and goals. This cluster or factor was called "Task-Cooperation" processes or the Task-Cooperation dimension.

Communication-Decision - Making Dimension - Factor 3 describes the communication processes and the quality of decision-making in the school. This factor was named the "Communication-Decision-Making" processes or the Communication-Decision-Making dimension.

Socio-Emotional Dimension - Factor 4 focuses on the friendliness and support present in the school. This cluster was called the "Socio-Emotional" processes or the Socio-Emotional dimension.

Involvement-Motivation Dimension - Factor 5 concentrates on the effect of involvement in setting goals and decision-making on the motivation of teachers. This cluster was called "Involvement-Motivational" processes or the Involvement-Motivation dimension.

## Hypotheses

In an attempt to answer the questions posed above the following operational hypotheses were tested. To avoid repetition of the same basic hypothesis for each of the twelve LBDQ subscales as criterion variable, the operational hypothesis is written in general form with identification of the twelve LBDQ variables immediately following.

Hypotheses:

H<sub>1</sub>: (1-12) ( $R^2 = 0$ )

There is no significant relationship between LBDQ XII, criterion variable (insert 1-12) and the five predictor variables, the Profile of a School factors.

- 1) Representation
- 2) Persuasion
- 3) Initiation of Structure
- 4) Tolerance of Freedom
- 5) Role Assumption
- 6) Consideration
- 7) Production Emphasis
- 8) Integration
- 9) Superior Orientation
- 10) Demand Reconciliation
- 11) Tolerance of Uncertainty
- 12) Predictive Accuracy

## Sample

The sample consisted of twenty-three of the thirty-three elementary schools in an urban district in central New York. These schools were selected on the basis of their willingness to participate in the study. All teachers willing to participate from these twenty-three schools were included in the sample. Seventy-seven percent (414) of the 537 teachers from these schools provided usable data on their school organization and

on their perception of the principal's leader behavior. Although certain data, such as demographic information for the sample used, would indicate that the sample studied is fairly typical of elementary schools across the United States, this study does not attempt to justify or suggest transfer to other populations.

### Method of Analysis

The TSAR stepwise multiple regression program was used to analyze data collected through the administration of the Profile of a School and the LBDQ-XII instruments. Multiple regression is a procedure whereby the relationship between the criterion variable and a set of predictor variables is determined. Stepwise multiple regression is an extension of typical multiple regression which allows examination of the effect of each predictor variable as it is added to the regression equation. In this study the focus was not upon prediction, per se, but upon the amount of criterion variance ( $R^2$ ) which could be accounted for by the predictors. The five factors from the Profile of a School served as predictor variables and each of the twelve leader behavior subscales of the LBDQ-XII served as a criterion variable. These analyses yielded information about the prediction of leader behavior given measures of organizational characteristics and information about the proportion of variance in perceived leader behavior which could be explained by organizational characteristics.

## Results

Since the regression analysis depends upon the magnitude of intercorrelation between the predictor and criterion variables, the overall correlation matrix is presented in Appendix A.

The results of the regression analyses for Hypotheses 1.1 through 1.12 are presented in Tables 1 through 12 (Appendix B). They are interpreted in a stepwise manner. As each Profile factor is added to the regression equation the coefficient of multiple determination ( $R^2$ ), the proportion of variance in the criterion explained by the predictors, increases. The multiple correlation coefficients ( $R$ ) ranged from a low of .63 for the criterion variable Predictive Accuracy to a high of .87 for the criterion variable Consideration. The coefficient of multiple determination ranged from a low of .40 to a high of .76. For ten of the twelve hypotheses dealing with perceived leader behavior a significant ( $p < .05$ ) portion of the variance was accounted for by the five Profile factors.

The multiple correlation coefficient represents a maximum correlation between the criterion and a weighted combination of the predictor variables. In cases where the sample size is small relative to the population size a correction for small samples is recommended (Gullford, 1956). Such a correction eliminates the bias inherent in the multiple correlation coefficient. In this study seventy percent of the selected sample volunteered and participated in the study. Since, however, school means were the unit of analysis and twenty-three is

a relatively small sample size the corrected coefficients of determination ( $C^{R^2}$ ) are also presented in Tables 1-12 (Appendix B). The range for the corrected multiple correlations was .46 to .83 and for the corrected coefficients of multiple determination the range was .22 to .68.

### Conclusions and Implications

The results reported as Tables 1-12 (Appendix B) show a significant relationship between organizational characteristics and perceptions of leader behavior. Of particular interest are the patterns of relationships. For example, the Task-Cooperation dimension of the Profile is significantly correlated (Appendix A) and as a result is the first variable added for leader behaviors Representation, Persuasion, Initiation of Structure, Superior Orientation, and Predictive Accuracy. Likewise, the Superior Orientation dimension of the Profile is related to leader behaviors Integration, Tolerance of Uncertainty, and Consideration; and the Involvement - Motivation dimension is related to Tolerance of Freedom and Demand Reconciliation.

One interpretation of these data is that the Task-Cooperation dimension is a reflection of the organizational environment as it pertains to getting the task done, or in social systems terms it describes the goal achievement dimension of the organization (Getzels, Lipham, & Campbell, 1968). Content analysis of the correspondingly correlated leader behaviors suggests that they are facilitating behaviors, related to getting the job done, in contrast to those which encourage

meeting individual adult needs of teachers.

In contrast, the Superior-Orientation and Involvement-Motivation dimensions of the Profile and the correspondingly correlated leader behaviors, particularly Integration, Consideration, Tolerance of Freedom and Demand Reconciliation, reflect a high degree of concern for the individual and his personal, adult needs. The behaviors described by the Profile in these dimensions describe the degree to which the organization maintains itself - particularly at the interpersonal level.

These results provide support for social systems theory and the Likert model of organizational management. Not only are leader-behaviors related to organizational processes of schools, but specific leader behaviors are related to processes which are interpersonal in nature.

Such results appear to have implications for the training of school leaders. If the participative group model of Likert is desirable for school organizations, leader behaviors related to interpersonal and group behavior provide a basis for changing the character of the school in this direction. Organizational development, leadership training, and principal selection focusing on these behaviors can and do (Feltler & Blumberg, 1971) initiate movement of an organization in this direction. Because the Profile of a School and the LBDQ-XII provide data regarding specific behaviors, diagnosis, prescription, and evaluation are facilitated.

This study supported theory about schools as organizations and analyzed relationships between organizational processes and leader behavior. The data suggest that the Profile of a School Questionnaire can be used to predict leader behavior. Further study is needed to determine the effects of organizational behavior on educational productivity, job satisfaction, morale, etc.

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## APPENDIX A

### Correlation Matrix for Leader Behavior and Profile Factors

Appendix A

TABLE 1  
CORRELATION MATRIX FOR LEADER BEHAVIOR  
SUBSCALES AND PROFILE FACTORS

	SUPERIOR ORIENTED PROCESSES	TASK- COOPERATION PROCESSES	COMMUNICATION- DECISION-MAKING PROCESSES	SOCIO- EMOTIONAL PROCESSES	INVOLVEMENT MOTIVATIONAL PROCESSES
Representation	-.017	.383*	-.332	.133	-.023
Persuasion	.265	.501**	-.022	.219	.315
Initiation of Structure	.154	.543**	-.176	.332	.183
Tolerance of Freedom Role	.785***	.273	.688***	.571**	.787***
Assumption Consideration	-.143	-.356*	.204	-.095	-.095
Production Emphasis Integration	.849***	.575**	.471*	.573**	.675***
Superior Orientation Demand	-.009	.403*	.053	.054	.259
Reconciliation Tolerance of Uncertainty Predictive Accuracy	.695***	.607**	.247	.642***	.590**
	.088	.430*	-.321	.370*	-.030
	.504*	.354	.259	.502*	.592**
	.850***	.400	.508*	.438*	.675**
	.384	.451*	.220	.163	.409

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

## APPENDIX B

### Step-wise Multiple Regression Tables

Appendix B

TABLE 1  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 REPRESENTATION AND SIGNIFICANCE OF  
 THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	c R <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.147	(.106)	3.62	N.S.
(3) Communication- Decision-making	.340	(.274)	5.15	.025
(5) Involvement-Motivation	.419	(.327)	4.57	.025
(4) Socio-Emotional	.480	(.365)	4.16	.025
(1) Superior Orientation	.490	(.340)	3.28	.05

Table 1 indicates that fifteen percent of the variance in the Representation subscale is accounted for by the Task-Cooperation dimension of the Profile. When the Communication-Decision-Making processes are added, the variance explained increases to thirty-four percent. A total of forty-nine percent of the variance for Representation is explained by the Profile dimensions.

Appendix B

TABLE 2

COEFFICIENT OF DETERMINATION VALUES FOR  
PERSUASION AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	c <sub>r</sub> <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.251	(.215)	7.06	.025
(3) Communication- Decision-Making	.274	(.201)	3.78	.05
(5) Involvement-Motivation	.506	(.428)	5.30	.01
(4) Socio-Emotional	.626	(.543)	7.54	.01
(1) Superior Orientation	.627	(.517)	5.73	.01

Table 2 indicates that twenty-five percent of the variance in the Persuasion subscale is accounted for by the Task-Cooperation dimension of the Profile of a School. Fifty-one percent of the variance is accounted for by a combination of the Task-Cooperation, Communication-Decision-Making, and Involvement-Motivation dimensions.

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TABLE 3  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 INITIATION OF STRUCTURE AND SIGNIFICANCE  
 OF THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	c R <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANC
(2) Task-Cooperation	.295	(.261)	8.80	.01
(3) Communication- Decision-Making	.397	(.337)	6.60	.01
(5) Involvement-Motivation	.531	(.457)	7.16	.01
(1) Superior Orientation	.512	(.404)	7.02	.01
(4) Socio-Emotional	.582	(.459)	4.74	.01

Table 3 indicates that thirty percent of the Initiation of Structure variance is accounted for by the Task-Cooperation dimension of the Profile. A total of fifty-eight percent of the variance is accounted for by the five Profile dimensions.

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TABLE 4

COEFFICIENT OF DETERMINATION VALUES FOR  
TOLERANCE OF FREEDOM AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	C <sub>R</sub> <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANCE
(5) Involvement-Motivation	.619	(.601)	34.16	.01
(1) Superior Orientation	.670	(.637)	20.33	.01
(2) Task-Cooperation	.709	(.663)	15.47	.01
(4) Socio-Emotional	.714	(.651)	11.22	.01
(3) Communication- Decision Making	.716	(.633)	8.58	.01

Table 4 shows that sixty-two percent of the Tolerance of Freedom variance is explained by the Involvement-Motivation dimension of the Profile. When all five dimensions are added into the regression equation seventy-two percent of the variance is accounted for.



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TABLE 5

COEFFICIENT OF DETERMINATION VALUES FOR  
ROLE ASSUMPTION AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	c R <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.126	(.084)	3.04	N.S.
(3) Communication- Decision-Making	.217	(.139)	2.77	N.S.
(5) Involvement-Motivation	.339	(.235)	3.24	N.S.
(4) Socio-Emotional	.487	(.373)	4.27	.025
(1) Superior Orientation	.496	(.348)	3.35	.05

Table 5 shows that only thirteen percent of the Role Assumption subscale variance is accounted for by Task-Cooperation processes. Fifty percent of the variance is accounted for by the five dimensions of the Profile when they are all included.

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TABLE 6

COEFFICIENT OF DETERMINATION VALUES FOR  
CONSIDERATION AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$cR^2$	F VALUE	LEVEL OF SIGNIFICANCE
(1) Superior Orientation	.721	(.708)	54.24	.01
(2) Task-Cooperation	.745	(.720)	29.21	.01
(5) Involvement-Motivation	.755	(.716)	19.52	.01
(4) Socio-Emotional	.758	(.704)	14.08	.01
(3) Communication- Decision-Making	.760	(.689)	10.78	.01

Table 6 indicates that a large proportion of the variance in the Consideration subscale is accounted for by Superior-Oriented processes of the Profile. Seventy-two percent is accounted for by this one dimension; seventy-six percent of the variance is explained when all five dimensions are included.

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TABLE 7  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 PRODUCTION EMPHASIS AND SIGNIFICANCE  
 OF THE REGRESSION EQUATION

FACTOR ADDED	R <sup>2</sup>	cR <sup>2</sup>	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.162	(.122)	4.07	N.S.
(1) Superior Orientation	.228	(.151)	2.96	N.S.
(5) Involvement-Motivation	.411	(.318)	4.42	.025
(3) Communication- Decision-Making	.514	(.406)	4.76	.01
(4) Socio-Emotional	.580	(.457)	4.70	.01

Table 7 indicates that forty-one percent of the variance in the Production Emphasis subscale is explained by inclusion of the Task-Cooperation Superior-Orientation, and Involvement-Motivation dimensions of the Profile. Fifty-eight percent is accounted for by including the remaining two dimensions, as well.

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TABLE 8

COEFFICIENT OF DETERMINATION VALUES FOR  
INTEGRATION AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$cR^2$	F VALUE	LEVEL OF SIGNIFICANCE
(1) Superior Orientation	.483	(.458)	19.64	.01
(2) Task-Cooperation	.566	(.523)	13.02	.01
(3) Communication- Decision-Making	.620	(.560)	10.34	.01
(5) Involvement-Motivation	.683	(.613)	9.68	.01
(4) Socio-Emotional	.683	(.590)	7.34	.01

Table 8 shows that forty-eight percent of the variance in the Integration subscale is accounted for by the Superior-Oriented processes of the Profile of a School. Sixty-eight percent of the variance is explained when the remaining four dimensions are added.

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TABLE 9

COEFFICIENT OF DETERMINATION VALUES FOR  
SUPERIOR ORIENTATION AND SIGNIFICANCE  
OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$c R^2$	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.185	(.146)	4.78	.05
(3) Communication- Decision-Making	.379	(.317)	6.12	.01
(4) Socio-Emotional	.450	(.363)	5.18	.01
(5) Involvement-Motivation	.451	(.329)	3.70	.025
(1) Superior Orientation	.451	(.290)	2.80	N.S.

Table 9 indicates that eighteen percent of the variance in the Superior Orientation subscale is accounted for by the Task-Cooperation dimension of the Profile.

Appendix B

TABLE 10  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 DEMAND RECONCILIATION AND SIGNIFICANCE  
 OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$cR^2$	F VALUE	LEVEL OF SIGNIFICANCE
(5) Involvement-Motivation	.351	(.320)	11.34	.01
(3) Communication- Decision-Making	.592	(.551)	14.51	.01
(2) Task--Cooperation	.622	(.562)	10.44	.01
(4) Socio-Emotional	.649	(.571)	8.34	.01
(1) Superior Orientation	.652	(.550)	6.38	.01

Table 10 shows that thirty-five percent of the variance in the Demand Reconciliation subscale is explained by the Involvement-Motivational processes of the Profile. When all five dimensions are included sixty-five percent of the variance is accounted for.

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TABLE 11  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 TOLERANCE OF UNCERTAINTY AND SIGNIFICANCE  
 OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$cR^2$	F VALUE	LEVEL OF SIGNIFICANCE
(1) Superior Orientation	.640	(.623)	37.43	.01
(4) Socio-Emotional	.666	(.639)	19.96	.01
(3) Communication- Decision-Making	.672	(.620)	12.99	.01
(5) Involvement-Motivation	.690	(.621)	10.04	.01
(2) Task-Cooperation	.693	(.603)	7.67	.01

Table 11 shows that sixty-four percent of the Tolerance of Uncertainty variance is accounted for by the Superior-Orientation dimension of the Profile of a School.

Appendix B

TABLE 12  
 COEFFICIENT OF DETERMINATION VALUES FOR  
 PREDICTIVE ACCURACY AND SIGNIFICANCE  
 OF THE REGRESSION EQUATION

FACTOR ADDED	$R^2$	$cR^2$	F VALUE	LEVEL OF SIGNIFICANCE
(2) Task-Cooperation	.204	(.166)	5.39	.05
(5) Involvement-Motivation	.247	(.172)	3.28	N.S.
(4) Socio-Emotional	.284	(.171)	2.51	N.S.
(3) Communication- Decision Making	.386	(.250)	2.83	N.S.
(1) Superior Orientation	.399	(.222)	2.26	N.S.

Table 12 shows that twenty percent of the variance in the Predictive Accuracy subscale is accounted for by the Task-Cooperation processes; and only forty percent is explained by addition of the remaining four dimensions of the Profile.



## APPENDIX C

### Profile of a School Questionnaire

## Appendix C

-----  
Name

### PROFILE OF A SCHOOL (Form "T")

#### Instructions for Teachers:

1. On the lines below each item, please place an "n" at the point which, in your experience, describes your school at the present time (n = now). Treat each horizontal line as a continuum from the extreme at one end to the extreme at the other, i.e., do not think of the vertical lines as barriers.
2. In addition, please place an "I" on each line at the point which, in your opinion, describes your school as you would ideally like it to be (I = ideal).
3. Since each teacher and student differs one from the other, answer the questions as describing the average situation or reaction.

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					Item No.
How often is your principal's behavior seen as friendly and supportive by teachers?	Rarely	Sometimes	Often	Very frequently	1
How much confidence and trust does your principal have in his teachers?	A great deal	Substantial amount	Some	Not very much	2
How much confidence and trust do you have in your principal?	Not very much	Some	Substantial amount	A great deal	3
How free do you feel to talk to the principal about academic matters, such as course content, instructional plans, teaching methods, your work, etc.?	Very free	Rather free	Somewhat free	Not very free	4
How often are your ideas sought and used by the principal about academic matters?	Rarely	Sometimes	Often	Very frequently	5
What is the direction of the flow of information about:	Downward from principal to teacher to student	Mostly downward	Down and up	Down, up and between teachers and administrators	
a. academic matters?					6
b. non-academic school matters?					7
Are downward communications accepted?	Almost always accepted. If not, openly and candidly questioned	Usually accepted, sometimes cautiously	Some accepted, some viewed with suspicion	On the surface, yes. Secretly, no. Viewed with great suspicion	8
How accurate is upward communication?	Usually inaccurate	Often inaccurate	Fairly accurate	Accurate	9
How well does your principal know the problems faced by teachers?	Very well	Quite well	Fairly well	Not very well	10
How often do you try to be friendly and supportive to:	Rarely	Sometimes	Often	Very frequently	
a. your principal?					11
b. other teachers?					12

					Item No.
What is the character and amount of interaction in your school:	Extensive, friendly interaction, with high degree of confidence and trust	Moderate interaction; often with fair amount of confidence and trust	Little interaction; principal and teacher usually maintain distance from one another	Little interaction; usually with fear and distrust	
a. between principal and teachers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13
b. among teachers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14
How much cooperative teamwork is present in your school among principal, teachers, students?	Very little	Relatively little	Moderate amount	Very substantial amount throughout school	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15
At what level are decisions made about school matters, such as course content, instructional plans, teaching methods, student behavior, student activities, etc.?	Throughout school. Principal, teachers, and students participating in decisions affecting them	Broad policy at top; more specific decisions at lower levels	Policy at top; specific decisions by teachers, but usually checked by principal before action	Bulk at top; by principal or superintendent of schools	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
Is decision-making in your school based on man-to-man or a group pattern of operation?	Man-to-man only	Man-to-man almost entirely	Both man-to-man and group	Largely group	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17
In general, what does the decision-making process contribute to the desire of teachers and students to do a good job?	Not very much, often weakens it	Relatively little	Some contribution	Substantial contribution	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
To what extent are decision makers aware of the problems of teachers?	Generally well-aware	Moderately aware	Aware of some, unaware of others	Often unaware or only partially aware	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19
In what extent are teachers involved in decisions related to their work?	Not at all	Occasionally consulted	Usually consulted	Fully involved in all decisions	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20
Who holds high performance goals for your school?	Principal, teachers, students, parents	Principal, most teachers, some students	Principal and some teachers	Principal only	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21

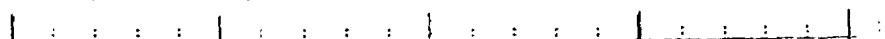
Who feels responsible for achieving high performance goals?

Principal only      Principal and some teachers      Principal, most teachers, some students      Principal, teachers students



How much secret resistance is there to achieving high performance goals?

Little or no resistance and much cooperation      Some resistance and some cooperation      Moderate resistance      Strong resistance



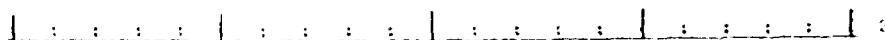
In what manner are goals established?

Issued by administrators      Goals issued; teachers may consent      Goals issued after discussion with teachers      Goals usually established by group participation



What is the level of performance goals which administrators seek to have the school achieve?

Extremely high goals      Very high goals      High goals      Average goals



What is the general attitude of teachers toward your school as a place to work?

Strongly favorable      Usually favorable      Sometimes hostile, sometimes favorable      Hostile



How are teachers motivated in your school?

Fear, threats, punishment, and occasional rewards      Rewards and some actual or potential punishment      Rewards, occasional punishment, and some involvement      Rewards based on group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc.



Do motivational forces conflict with or reinforce one another?

Marked conflict of forces reducing behavior in support of the school's goals      Conflict often exists; occasionally forces will reinforce each other, at least, partially      No conflict, but occasional motivational forces will reinforce each other      Motivational forces generally reinforce each other in substantial and cumulative manner



How often are attitudes toward other teachers favorable and cooperative, with mutual confidence and trust?

High degree of confidence and trust      Some trust and cooperativeness      Some distrust      Frequent hostility



How much satisfaction is derived from supervision received?

High satisfaction      Moderate satisfaction      Some dissatisfaction      Usually dissatisfaction

