In a study to determine the relationship between the behavior of school system leaders and curricular change, interview and questionnaire response data were analyzed from two populations: (1) Perceived central office curricular decision makers of 10 public school systems in the State of Wisconsin, and (2) a sampling of 335 K-12 classroom teachers in those systems (187 of the classroom teachers in each system). Curricular decision makers were identified as eight superintendents, one director of curriculum, and one assistant superintendent of instruction. Leader behaviors considered were those of Initiating Structure and Consideration. Teacher acceptance and implementation were evaluated for 335 curricular plans produced from 1962 to 1965. Analysis of the study’s findings indicated that there is a direct relationship between the consideration a curricular decision maker shows his teachers and the extent to which his curricular plans and guides are used by his teachers in planning their instructional programs. (JK)
Leader Behavior, Curricular Implementation and Curricular Change,*

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The student of human behavior can ill afford to ignore the organizational aspects of man. That such has not been the case is the obvious fact -- the study of human behavior in the context of organizations in recent years has become a focal point for the interest of social scientists. In particular, the study of leaders, leadership, and more recently and specifically, leader behavior, has received attention to the point that these topics are neither new nor novel. Not withstanding the sums of human energy and effort devoted to better understanding leader behavior and its relationships with other variables, much remains speculative and not researched. As an area of investigation, the summit has yet to be reached from which the researcher may have an all-inclusive perspective of leader behavior.

Education is conducted at the community level as an organizational enterprise. Leader behaviors are manifested in a school system as in any other organization. The student of educational administration has an obvious interest in seeking to understand leader behavior for an educational administrator.

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occupies a hierarchical position of status and authority, and his leader behaviors are observed by the members of the organization--the teachers of the school system. If an educational administrator were to understand the effect of his leader behaviors, logically he could increase the potential and impact of his leadership in the administrative task areas for which he bears responsibility in the school system. In this study attention was focused upon leader behaviors and curriculum, one of the task areas of responsibility for the educational administrator.

Hypotheses

The purpose of this research was to investigate association between certain leader behaviors, curricular implementation and curricular change. While leader behavior has received attention of behavioral scientists in recent years, there has been little reported exploration in the field of educational administration of the relationships between leader behavior and curricular plan use and extent of curricular change in those plans. The intent of this investigation was to establish whether or not in selected school systems significant relationships existed as follows: (1) between certain categories of perceived leader behavior of central office curricular decision makers and perceptions of implementation of curricular plans; (2) between certain categories of perceived leader behavior of central office curricular decision makers and perceptions of extent of change in those implemented curricular plans; (3) between agreement of perceptions of leader behavior of central office curricular decision makers and perceptions of implementation of curricular plans.
plans; and (4) between agreement of perceptions of leader behavior of central office curricular decision makers and perceptions of extent of change in those implemented curricular plans. The agreement mentioned in hypotheses (3) and (4) referred to that existing between an identified curricular leader and selected, representative teachers of a school system. The leader behaviors considered were those of Initiating Structure and Consideration. Each of these hypotheses was pursued operationally in depth.

Design of Study and Methodology

Two populations were incorporated into this research. The first consisted of the perceived central office curricular decision maker of ten public school systems in the state of Wisconsin; the second included a sampling of classroom teachers of those systems. Each of these populations was determined from administration of an instrument, the Decision Point Analysis, to the base population of Project 1913.  

The responses on the Decision Point Analysis instrument were recordings of perceptions of who in the school system had responsibility for making decisions in five functional areas—pupil personnel, staff personnel, curriculum, business management and school-community relations. From these responses, those pertaining only to the decision items about curriculum were identified; for purposes of this research, these particular responses were considered to reflect perceptions of who had responsibility for making solely curricular decisions. These responses in the curricular task area of administration
were treated as being indicative of nominations of curricular decision makers. Attention was directed only to those responses which identified central office positions. All administrative and supervisory personnel, and itinerant teaching personnel, and their responses were excluded from the nominating group to provide a relatively homogeneous population in each school system composed entirely of classroom teachers. The resulting basic population constituted 1,849 classroom teachers who instructed in kindergarten and grades one through twelve.

In each of the ten school systems, responses of classroom teachers to the curricular decision items of the Decision Point Analysis instrument were tabulated manually to identify the central office curricular decision maker. Weightings were assigned to rank-order responses, thus enabling the responses for each central office position to be converted to comparable values and summed into a total weighted score. The occupant of the central office position in each school system having the greatest total weighted score was selected as the central office curricular decision maker of that system. Eight of the ten identifications were superintendents, the chief administrators of their respective school systems, and one each were entitled Director of Curriculum and Assistant Superintendent of Instruction. These, then, were the individuals whose leader behavior was examined.

To form the second population of this study, individuals were selected from the 1,849 classroom teachers, whose responses to the Decision Point Analysis instrument were used to identify the curricular decision maker for
each school system at the central office. The inclusion of certain classroom teachers depended primarily upon their use of curricular plans identified and sampled in each of the ten systems by staff members of Project 1913 conducting the second phase of the project.

Printed and written materials dealing with curricular content, design, and instructional procedures related to teacher-pupil interaction were collected from the ten school systems. These materials were reproduced and distributed by each school system through its administrative offices. The materials collected were those produced during the school years 1962-63, 1963-64, and the months of September and October, 1965. The staff members of project 1913 analyzed each of the curricular communications and accepted it as a curricular plan, if in a majority of the judgments of the staff members, the following criteria were met:

1. It was a statement of the scope and sequence of content for an area.
2. It was locally produced.
3. It dealt with curricular design as opposed to administrative managerial directives.
4. It had been revised in the process of reproduction.
5. It was not repetitive of a previously distributed document.
6. It was a reorganization of a previous plan.

Subject and broad field curricular categories were utilized to classify plans from kindergarten to grade twelve. A total of 615 curricular plans were identified by the staff of Project 1913, with a minimum of 21 to a maximum of 110 curricular plans coming from any one school system.

It was determined to sample the classroom teacher population via the selection of curricular plans which were identified in the ten school systems.
The curricular plans were numbered in each system; using a table of random numbers, sufficient plans per system were drawn to provide eighteen per cent of the classroom teachers in each system at the rate of one teacher per plan, or a total of 335 curricular plans and classroom teachers.

An appointment was secured with the administrator of each school system; using the pertinent selected plans, the administrator or an associate designated by him, was asked to indicate three teachers who had responded to the Decision Point Analysis instrument and who were teaching in the subject area and grade level of each curricular plan. Names of three teachers per plan were secured; however, of the three nominations received, only one was to become part of the second population of the study. To eliminate possible bias on the part of the administrator, a decision was reached to contact the second named teacher in the succeeding interview situations. The administrator's first and third indications were used as alternates in the event of disqualification.

Through individually structured interviews, the perceived central office curricular decision makers and the selected 335 teachers of the ten systems responded to the 1957 edition of the Leader Behavior Description Questionnaire, considering the central office curricular decision maker as the leader in question. Permission had previously been requested and received to use this instrument from the Bureau of Business Research, The Ohio State University. Two specific dimensions of leader behavior identified
through this instrument were Initiating Structure and Consideration.

Halpin described these two elements in the following manner.

Initiating Structure refers to the leader's behavior in delineating the relationship between himself and the members of his group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting the job done. Consideration refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of the group. 3

The second instrument administered in the structured interview was the Curriculum Implementation Index. This instrument was created in conjunction with Project 1913 to serve both as a guide to the interview and as a scoring sheet for responses obtained in the interview. The instrument had two forms, one each for use with classroom teachers and with the central office curricular decision maker; these differed only in the phrasing of leading questions, but were otherwise identical in content and format. The Curriculum Implementation Index was developed to disclose instructional plan use and perceived extent of change contained in a given plan as contrasted to the previous instructional plan. Three broad areas of possible instructional plan use--program, organization, which incorporated interpersonal relations, and facilities--were included in the format of the instrument; each of these areas contained four representative decision-making activities in which teachers employ curricular plans.

In the interview, the respondent was presented a copy of the plan previously identified as applicable for use in the teacher's instructional program. Responses to the twelve representative decision-making activities relative
to curricular plan usage by the teacher were recorded on the instrument in scale form; a similar procedure was followed to record the perceived extent of change the plan represented in comparison to the previous instructional plan. Where changes were indicated, respondents were asked to specify whether the change was due to an addition, a rearrangement or a deletion of material.

The central office curricular decision maker was asked to respond to three curricular plans, selected at random from those to which the teachers were responding. Data obtained from administering the instrument were quantified through summing the columns of recorded, scaled responses.

Consistency of measurement was secured for the classroom teachers' group; the method used was one of test-retest. Correlations were obtained for curricular plan usage and perceived extent of change in curricular plans, which indicated the Curriculum Implementation Index was consistent in measurement above the .001 level of significance.

Data, secured from the administration of the Leader Behavior Description Questionnaire and the Curriculum Implementation Index, were used to test the hypotheses. Where agreement scores on leader behavior were necessitated, the difference between the score of the central office curricular decision maker and the mean score of the teachers for each system was computed. The methods employed to examine the data were those of Pearson Product-Moment Correlation and Spearman Rank-Difference Correlation.
Summary of Findings

The findings which were obtained are summarized according to the major hypotheses. No all encompassing significant relationship was revealed between perceived leader behaviors and perception of implementation of curricular plans. One significant exception was disclosed, however. A statistically significant, positive correlation, above the .05 level of confidence, was established between the teachers' perceptions of their implementation of curricular plans and their perceptions of the Consideration behavior of their central office curricular decision makers.

With regard to perceived leader behaviors and perception of extent of change contained in implemented curricular plans, no over-all significant relationship was disclosed. Neither were there any operational exceptions. The correlations which were obtained were positive, but not of significant consequence.

All operational hypotheses dealing with agreement of leader behaviors and implementation of curricular plans displayed negative relationships. Again, no all encompassing significant relationship was established. One operational exception was disclosed, however; this relationship pertained to the agreement of perceptions between a curricular leader and the teachers of a system regarding the leader's Initiating Structure behavior and the teachers' perceptions of implementation of curricular plans. This statistically significant, negative relationship was established above the .05 level of confidence. In other words, as the curricular leader and teachers of a system agreed in their perceptions of the curricular leader's Initiating Structure behaviors, the teachers perceived less curricular plan implementation.
With regard to agreement of perceived leader behavior and perception of extent of curricular change contained in implemented plans, analysis disclosed no over-all significant relationship. Neither were there any operational exceptions.

Augmenting these results, product-moment correlations were computed and discovered to be positive, though not statistically significant, in explaining the relationships between the curricular leaders' scores of Initiating Structure and Consideration and the teachers' scores of Initiating Structure and Consideration. A comparison of the Initiating Structure and Consideration behavior scores of the curricular leader and the mean scores of the teachers of each system disclosed an interesting pattern. In each behavior dimension the scores of the curricular leaders were consistently higher than those accorded by the teachers. Positive, though not statistically significant relationships were disclosed between the curricular leaders' scores and the teachers' scores of curricular plan implementation and extent of curricular change in those implemented plans.

Summary and Conclusions

The general purpose of this study was to explore and establish empirically whether or not relationships existed between certain perceived curricular leader behaviors and curricular plan implementation and perceived extent of change contained in those implemented plans. No all inclusive significant relationships among these elements were established.
Perceived Initiating Structure and Consideration behaviors of the central office curricular leader were not established to be in significant relationship to perceived implementation of curricular plans nor to perceived extent of change contained in those implemented plans. One significant exception to this conclusion was identified as the positive relationship established between the teachers' perception of Consideration behavior and their perception of implementation of curricular plans. Agreement on perceived Initiating Structure and Consideration behaviors of the central office curricular leader were not determined to be in significant relationship to perceived implementation of curricular plans nor to perceived extent of change contained in those implemented plans. A significant exception to this conclusion was the negative relationship ascertained between agreement of perceptions of Initiating Structure behavior and the teachers' perception of implementation of curricular plans.

These conclusions drawn upon the findings must be tempered by the limitations imposed by the characteristics of the sample. Generalizations based upon the findings of this study, but which extend beyond the sample, must naturally be made with care. In addition, caution must be exercised against considering the established relationships in a cause and effect manner.

An additional observation is that the Curriculum Implementation Index instrument is an adequate device for obtaining information regarding curricular plan implementation and perceived extent of change contained in those plans.
A considerable amount of time and attention is reportedly devoted in school systems toward curricular improvement. An implication for the educational administrator is contained in the following statement. If maximum gain is to be obtained for the instructional program, the educational leader at the central office level, carrying curricular improvement responsibilities, might do well to reflect upon the concept that there is a direct relationship between the consideration he shows his teachers and the amount the staff members used their curricular plans and guides in planning their instructional programs.

The absence of the establishment of more numerous operational relationships between the variables of this study poses questions about the leadership role of the central office curricular decision maker, a leader by virtue of status and hierarchical position in the organizational structure of the school system. Further research should be conducted to provide information about the expectations, fulfillment and behavioral effect of the leadership role in this administrative task area at the central office level. Certainly, more knowledge is desirable in ascertaining and comparing the behavioral effects of the fulfillment of this role by practicing administrators who are generalists and "jacks of all trades" as opposed to those who are specialists in curricular and instructional improvement.

Further research is also desirable to provide explanation why agreement of perceptions on central office leader behaviors tend to be negatively correlated to perceptions of curricular plan implementation and perceived extent
of change in those plans. The possible influence of mediating variables, such as personality traits, characteristics, and value orientations, suggests the necessity of further contemplation and investigation.

In addition, further research is necessary to explore cause and effect in the established operational relationships of the variables of this study. It is suggested that in order to expand insight about additional possible relationships occurring between perceived leader behaviors, curricular plan implementations and extent of change in such plans, the particular leader behaviors to be explored might well be those of the principal, the hierarchical leader of the school organization at the building level. Although no all encompassing relationships were established among the variables in this investigation, sufficient information was disclosed to encourage additional research with a larger number of systems incorporated into the sample. In so far as there remains a possibility that such relationships may exist, this matter deserves further attention in the study of educational administration.


3 Andrew Halpin, Manual for the Leader Behavior Description Questionnaire (Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1957), p. 2. (Mimeographed).